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September, 1954

SOAP *and* Chemical Specialties

formerly SOAP AND SANITARY CHEMICALS

On this issue...

ewer, better detergents
sed on tallow alcohols

* * *

T in wool mothproofing
effective in laundering?

* * *

permarket technique ups
pt. store sales of soap

* * *

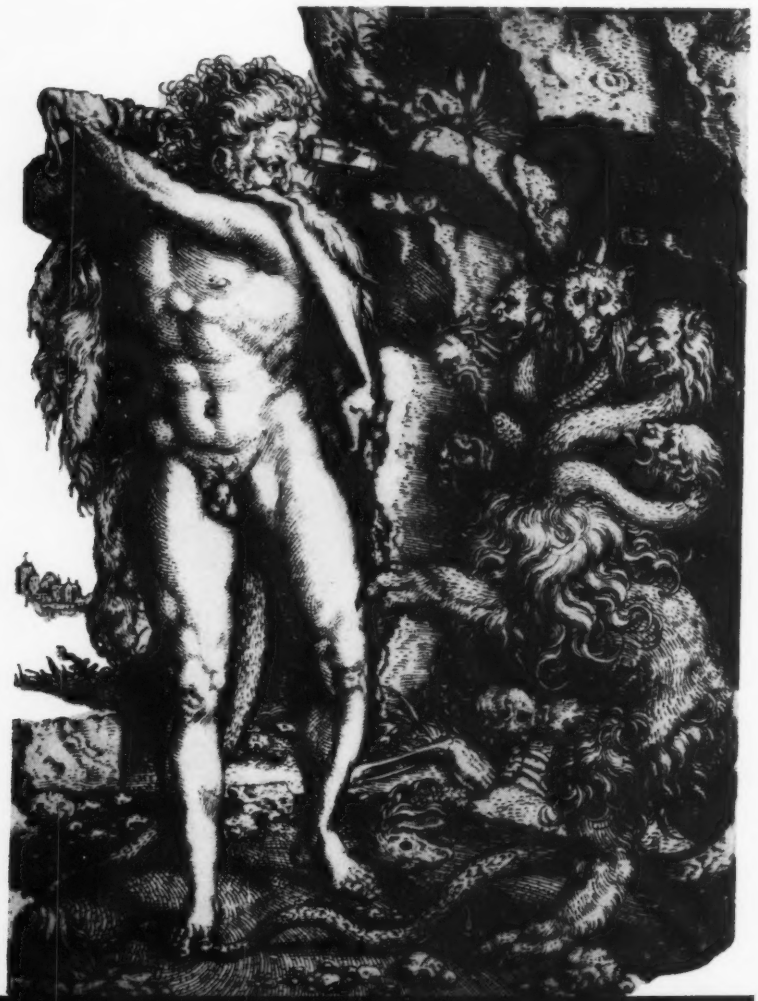
e sanitary supply sales
mmissions out of line?

Cover photo . . . Newest addition to Los Angeles Soap Co. line, "White King" liquid detergent, a 12 ounce lithographed white can with red lettering and blue trademark band, red plastic top.

No. 4 of a series

HAVE YOU A HERCULEAN TASK?

To the mind of many an overburdened businessman today, Hercules' best known labor . . . that of slaying the many headed Hydra . . . would find a modern parallel. Only too often, in the course of developing a new product involving a masking or reodorizing problem, does a manufacturer find that having disposed of one or two difficulties, several others have suddenly appeared in their place. It is precisely to handle this kind of situation that the D&O Industrial Odorant Laboratories have been organized to process each problem on an individual basis. A specialized approach eliminates at the very beginning the "reappearing" aspect of the problem, and the multiple heads can then be dealt with effciently and in short order. If you have a deodorant or reodorant problem, let the D&O Perfume Technologists remove this facet of your Herculean task.



Hercules destroys the Lernean Hydra . . . a monstrous water snake with many heads, which grew again as soon as they were cut off. In this labor he was aided by his friend Iolus.

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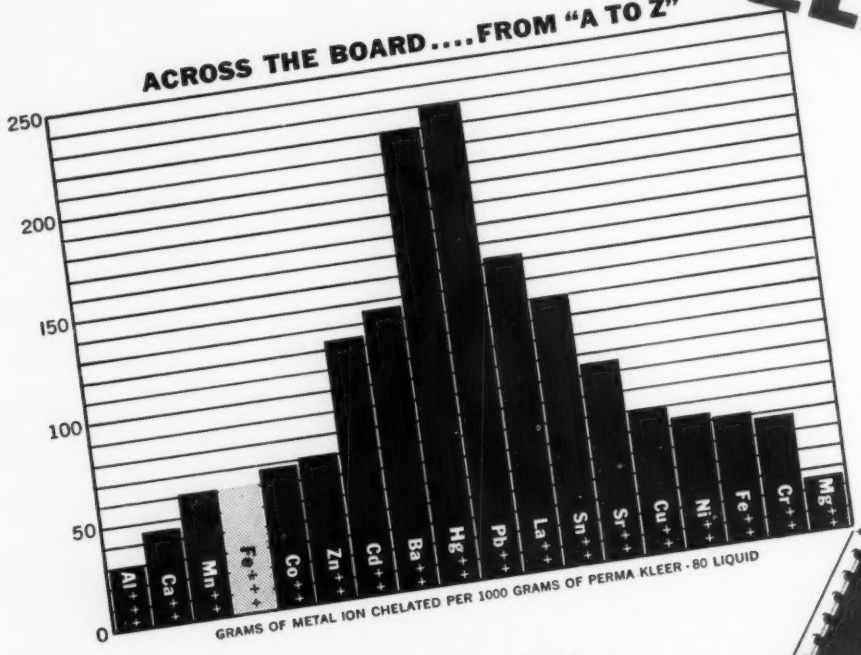

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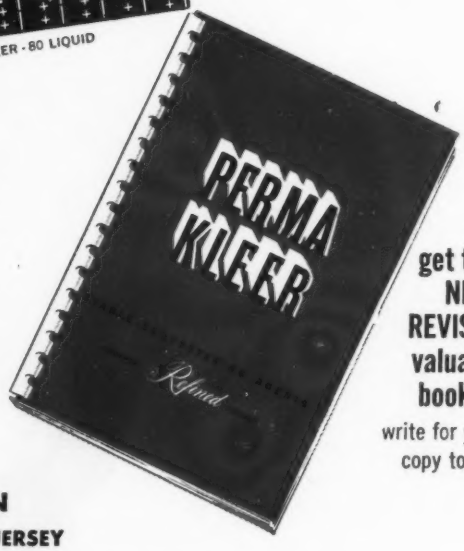

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Volume XXX, No. 9 September, 1954

SOAP and Chemical Specialties

Formerly Soap and Sanitary Chemicals

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RESEDALIA

AN ACETAL

PHYSICAL APPEARANCE:	Colorless liquid; APHA 10 Max.
ODOR TYPE:	Floral; resembles Reseda Mignonette.
SOLUBILITY:	10 parts soluble in 100 parts 70% Ethyl Alcohol.
STABILITY:	Very stable in neutral and alkaline media.
REFRACTIVE INDEX:	1.4972 (R.I. n $\frac{20}{D}$)
SPECIFIC GRAVITY:	$\frac{20}{20}$: 1.0020
SUGGESTED USES:	1% to 5% in formulation of floral odors for perfumes, creams, powders and soaps. As addition, ¼% to 1%, to existing compounds to round off and improve odor character.
QUALITY:	Held to rigid specifications by our control laboratories; carefully analyzed by the most modern methods, including infra-red absorption.

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A Wax for Every Price or Need!

CONCENTRATED SELF-POLISHING WAX
24-26% solids
Affords substantial freight savings. Dilute to any percentage desired. This wax is of the very best quality.

HYPER-WAX
18% solids
This very finest quality long wearing wax is a labor saver and quite economical in the long run. Its steady repeat sale to those who used to pay less for their wax proves its thriftiness.

FORMULA 1823
18% solids
A long wearing wax at a lower price.

FORMULA 1822
12% solids
A good wax and a good buy.

HY-LUX
13, 16, 19% solids
Finest non-slip wax you can offer your trade for asphalt tile and slippery floors. Contains du Pont Ludox*.

BALA-WAX
The Balanced Wax
14% solids
Contains all features desired in a high grade wax. Not priced too high for continuous repeat business from satisfied customers.

FORMULA F151
12% solids
A fine wax at an exceptionally low price yet meets government specifications.

7

Hysan

QUALITY CONTROLLED

floor waxes

Every one of these 7 waxes is a proven repeat seller—made by Hysan, for 25 years a leading wax manufacturer for the sanitary supply trade.

If you seek a better wax to sell your quality trade—Hysan has it. If you need a good wax priced to sell, Hysan will cooperate with you. Besides these 7 leading Hysan waxes—all available for private label—we can also supply waxes made and labelled to your own or customer's specifications. Call Hysan when bidding on a large contract—we'll give you all the help we can to help you close it.

MAIL COUPON FOR PRICES AND INFORMATION

*Ludox is a product and trademark of E. I. du Pont de Nemours & Co., Inc.

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932 W. 38th Place, Chicago 9, Ill.

Please send prices and information on the following floor waxes:

☐ CONCENTRATED SELF-POLISHING WAX
☐ HYPER-WAX
☐ FORMULA 1823
☐ FORMULA 1822
☐ HY-LUX
☐ BALA-WAX
☐ FORMULA F151

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A GUIDE

TO WAX PRODUCTS PURCHASING FOR PRIVATE BRAND RESALE

POLISHING WAXES

Candy's Supreme (standard)
Bright Beauty (standard)
Candy's Supreme Special WR
CAND-DOX #CS
CAND-DOX #BB

Five floor waxes that *are* all-around top quality for any given traffic condition. Each imparts the finest protection and beauty to floors for which they are best suited.

Bright Beauty WAX REMOVER & All-Purpose SURFACE CLEANER

Properly used it will remove water-emulsion wax from any floor without harmful effects to floor or floor coloring. It is the perfect floor maintenance wax remover and all purpose surface cleaner. Pleasant odor, crystal clear and thorough cleaning action with all types of equipment. Is unaffected by hard freezing. Furnished ready for resale or in concentrated form for those who want to compound their own cleaner . . . nothing but water to buy or mix in.

Bright Beauty CREAM FURNITURE POLISH

A cream furniture polish that spreads easily, polishes without excessive effort and imparts a deep impressive lustre. Too, it permits *repeated repolishing* with a dry cloth saving reapplication time and again: truly a very economical polish of very highest quality.

Bright Beauty PASTE WAX

A paste wax that is properly blended and refined from excellent quality solids and solvents that produce the best drying time and thorough evaporation. A wax that is easy to handle, having "creamy" consistency and stability throughout its stocking and usage period.

Bright Beauty LIQUID (spirit) PREPARED WAXES

Complete line of spirit dissolved waxes that meet a wide variety of demands for durability, color and types of usages. Each its own "Dry Cleaner," they keep a surface waxed with a superb protective coating necessary to many difficult surfaces such as certain floors (where adaptable), bars, wallpaper, etc.

Bright Beauty GLASS POLISH & CLEANER and SILVER POLISH

As a Glass Cleaner (pink color) it applies evenly with little effort, wipes off easily with negligible "powdering" and produces an undeniable "feel" of cleanness to glass that is actually true in fact. Different in color only as Silver polish, it imparts a highly desirable lustre to all silver *without* abrasion and can even correct the abuses of scratchy, "quick-polish" inferior products.

Bright Beauty DANCE FLOOR WAX

Basic advantages are freedom from "balling up," thus does not gather dirt and impregnate the floor with hard spots difficult to remove...also is free from dusty effects. Adds the protective quality to expensive ballroom floors that means more "floor-years" to users everywhere.

Bright Beauty Heavy Duty PASTE CLEANER

Really *cleans* and *scours* more effectively and quicker than most scouring powders. Depending on application, it can clean to perfection even painted walls to provide a suitable repainting surface. 100% active, free from excessive abrasive quality, it frees almost every surface from all forms of foreign matter to perfection.

CANDY'S DISTRIBUTION AND SALES POLICY

Our products are available for private brand resale and are sold only through Distributors except for experimental accounts in Chicago essential to research.

An honest appraisal o floor wax products as w see it is offered to guide wa buyers who want the best qualit money can buy...

1. BEAUTY AND DURABILITY

should be considered together. Initial appearan is important, but for a waxed surface to rema beautiful it must be durable. Durability depe not only on resistance to the abrasion of traf but even more so on resistance to the collecti of dirt and to discoloring traffic marks. Durabil is really measured by how long the waxed su face maintains a nice appearance before t necessity of complete removal and re-waxing.

2. ANTI SLIP

qualities are necessary in a good wax as a ma ter of safety underfoot. This important quali does not necessarily require the sacrifice o beauty and protection which are the forema original reasons for the use of a wax. Look fo the proper balance—a wax film which is n excessively slippery yet which is not tacky an does not excessively collect dirt.

3. WATER RESISTANCE

is important, particularly when considering th possibility of wet traffic and the necessity fo frequent damp mopping for the purpose of re moving surface dirt. Overdoing this quality mea greater difficulty in applying multiple coats o wax and may seriously increase the difficulty o removal when complete cleaning and re-waxin is necessary. Water resistance is important, b so is the quality of removability.

4. SOLID CONTENT

when expressed in percentage is not nearly a important as the *quality* of the solid conten When considering good quality, 12% of solid answers most needs for good planned mainte nance programs. Two applications of 12% wi give better results than one of 18%. However the more concentrated material is useful for som programs of maintenance and particularly fo "washed-out" floors, etc. Over-waxing should b avoided so that periodic complete removal wi not be too difficult.

5. CARNAUBA WAX

is still the most important basic ingredient in ou floor waxes. When refined and compounded wit other important ingredients and "KNOW HOW" it aids materially in producing the most importan features of a good floor wax... ALL AROUND QUALITY OF PERFORMANCE.

Wax Specialists for over 60 years

Candy & Company, Inc.

2515 W. 35th ST., CHICAGO

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from the **EMULSOL** lab

A thought or two about things new and interesting in the field of surface-active chemistry . . .

solving solvent safety

Have you any old diesel locomotives, ship's oil bunkers or auto engines that need degreasing? It'll be a lot safer if the solvent with oil and water soluble soils are emulsified away with EMCOL H50A or any of its cousins.

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CHEMICAL WEEK

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for Tough EMULSION DEGREASING jobs...

when you formulate concentrates with Emulsifiers

EMCOLS H-50A or H-52

Emulsol "Soapless" degreaser emulsifiers are taking top honors for better performance because of:

1. Lower emulsifier levels for reduced costs—
2. Higher solvent concentration for increased degreasing loads—
3. Greater spontaneity of emulsion with hot or cold water—
4. Complete hard or soft water range compatabilities—
5. Choice of "protective film" or oil-free rinsability—
6. No sludging or scumming to clog nozzles—
7. Safer solvent adaptability minimizing toxic hazards—
8. Liquid emulsifiers for simplified pumping and blending—
9. Balanced component blended for uniform performance control—
10. Non-staining action to degreased metal surfaces—
11. Reserve "surfactant-power" to lower surface tension, suspend soils, and to clean water-soluble soils in addition to degreasing action—
12. Suitable for either emulsifiable or circulating emulsion systems.

ESPECIALLY EFFECTIVE

for the unusual degreasing requirements of such industries as

- **aircraft**
- **automotive**
- **electronic**
- **farm and road machinery**
- **marine**
- **mechanical**
- **metal treating**
- **military materiél**
- **oil field and transport**

You are invited to consult in confidence with your local Emulsol technical representative or our emulsion specialists.

THE EMULSOL CORPORATION

59 EAST MADISON STREET • CHICAGO 3, ILLINOIS, U.S.A.

Which car of Caustic Soda saves you the most money?

Both of these cars look alike, and their capacities are the same. Both are filled. Yet the one on top may save you $131 per car. Can you guess why?

The answer is simply that the car on top contains 73% caustic soda, while the other contains 50%.

More and more companies are specifying the higher concentration in order to save money. These savings are possible because:

1. A car of 73% contains more caustic by volume.
2. A car of 73% can be unloaded as fast as a lower concentration, thereby saving man-hours.

One Columbia-Southern customer who converted from 50% to 73% figured the savings to his company at $131 per car. Other customers who made the changeover show total annual savings ranging from $1179 to $35,100.

The amount of caustic soda you use and your location will determine how much you may save. But the point is: If you use caustic soda, you owe it to yourself to check the possible economies. Our staff will be glad to do the figuring for you—no obligation, of course. Just contact the Caustic Soda Department at our Pittsburgh office.

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ALKYLOLAMIDES

"The Detergents that Thicken when they're Thinned"

Originated by NINOL LABORATORIES in the late '30's, these nonionic detergents and emulsifiers have grown steadily in popularity as their unique properties became better understood.

Members of the NINOL series of alkylolamides (or amine condensates, as they are sometimes called) range from water soluble liquids to hard, insoluble waxes and possess many unusual properties such as *high viscosity in solution* and *rust inhibiting power*. By proper selection, suitable products can be found for many different applications.

SYNTHETIC FLOOR CLEANERS:

NINOL 1281 is extremely well adapted to formulating liquid synthetic floor cleaners. It produces cleaners with excellent detergency, high viscosity and non-rusting features that make it possible to ship in unlined steel drums.

DISHWASHING DETERGENTS:

Certain alkylolamides, such as *NINOL AA62* or *NINOL 2012E*, possess outstanding foam stabilizing action, and are used in blends with alkyl aryl sulfonates to formulate dishwashing detergents that foam better in the presence of grease.

SOAPS:

Manufacturers of liquid soaps for floor cleaning, shampoos or hand dishwashing can upgrade their products by addition of products like *NINOL 1281*, which disperses curds, thickens and helps cleaning by greater wetting action. The *NINOLS* do not decrease the foam of soaps.

COSMETICS:

The *NINOLS* are widely used in shampoos and bubble baths. Products like *NINOL 979* or *2012E* increase the "body" of liquid formulations and improve the flash foam of the lauryl sulfates and alkyl aryl sulfonates, besides imparting a more soapy feel. Waxy products like *NINOL CB60* impart pearl to liquid cream shampoos, and *NINOL CB10* produces high opacity.

DRY CLEANING:

Oil soluble alkylolamides like *NINOL HA10* are used to form water-in-oil stock emulsions by means of which dry cleaning operators introduce water into the wheel.

METAL TREATING:

The rust inhibiting properties of several of the *NINOLS* can be used to overcome rusting of cleaned metal, as by using *NINOL 1281* in the final rinse. They can also be used in cutting oil emulsions to prevent rusting of the work. *NINOL 201* is an oil soluble emulsifier that gives loose kerosene emulsions of the type used in diphase solvent cleaners.

TEXTILES:

Alkylolamides like *NINOL 737* and others have been found the best money value for scouring raw wool. They are also used as dye leveling agents, and as sizing and finishing agents for the newer synthetic fibers. They also impart excellent anti-static effects.

MISCELLANEOUS:

NINOL 1001 is very effective as a solubilizing agent for bringing into solution products like the new germicide Vancide 89. *NINOL 1281* is an excellent emulsifier for Carnauba wax, and gives emulsions that are resistant to the presence of salts. It is also an effective polymerization emulsifier for GR-S rubber. *NINOL 2012E* is recommended as an emulsifier for adding plasticizers to latex paints. *NINOL 737* is used in wetting back leather prior to tanning.

NINOL *Detergents— —Emulsifiers*

★

Our long experience in the field of alkylolamides is at your disposal. For samples or information, write today.

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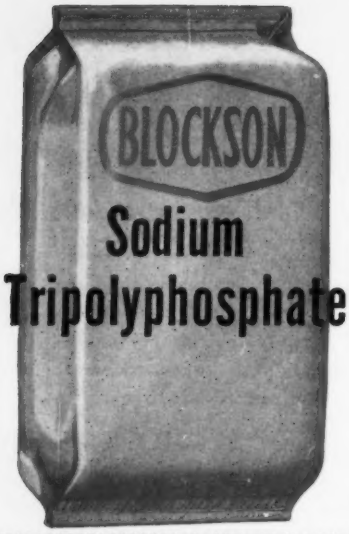
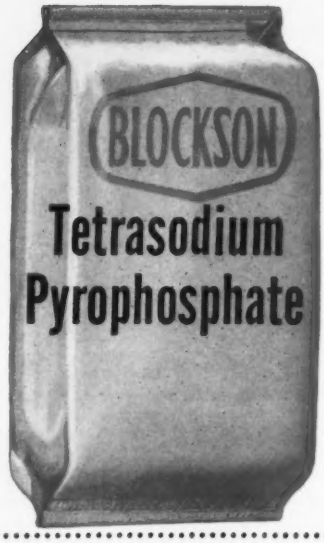
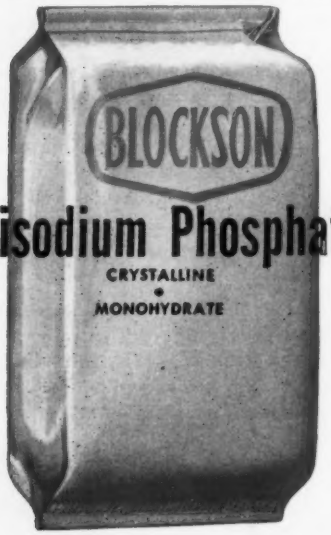
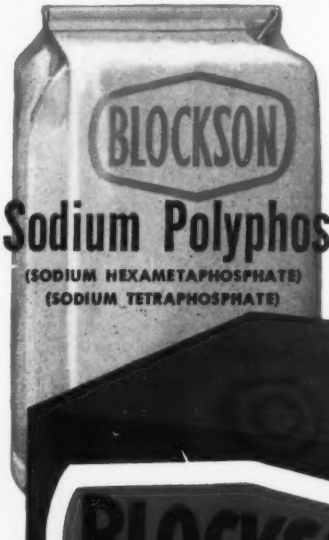








Sodium Polyphos is Blockson's brand name for a water soluble Glassy Sodium Phosphate with the desirable characteristics of Sodium Hexametaphosphate and Sodium Tetraphosphate.

ALSO MAJOR PRODUCERS OF:

SODIUM ACID PYROPHOSPHATE

CHLORINATED TRISODIUM PHOSPHATE

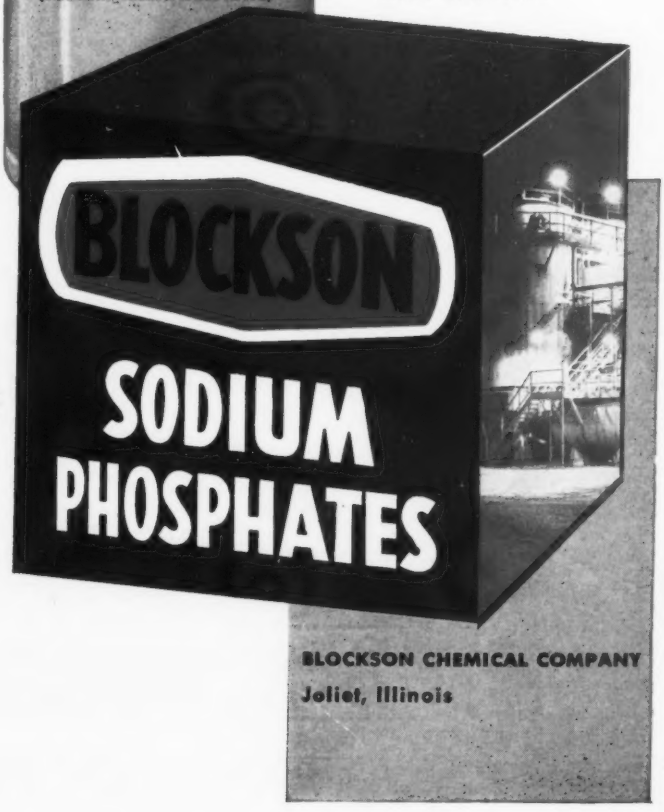
DISODIUM PHOSPHATE
ANHYDROUS • CRYSTALLINE

MONOSODIUM PHOSPHATE
ANHYDROUS • MONOHYDRATE

SODIUM FLUORIDE

SODIUM SILICOFLUORIDE

HYGRADE FERTILIZER



SIPEX

THE Alcolac Almanac

SIPON

AMERICAN ALCOLAC CORPORATION
SEPTEMBER 1954

DOWNWARD TREND NOTED IN ALCOHOL SULFATE PRICES

The price of alcohol sulfates has been slowly, but steadily, declining for some years although the quality has been further improved. Recent market analyses have shown that the long-range price trend of natural fats and oils is downward. The widespread fear of the price fluctuation of these natural products is already based on memory rather than present facts.

With long years of surfactant experience in fatty alcohols behind them, Alcolac's work with fatty alcohol sulfates has brought about substantial price reductions. This has permitted new users to take advantage of the properties of these products. No doubt many additional applications would benefit by their use. Alcolac's technical representatives and laboratories will be glad to help you in your work with these products.

TWO CHEMISTS JOIN FIRM . . . APPLICATIONS-MAN WANTED

Mr. Serge Giers, Technical Director, has added Mr. Ralph A. Pentz, Jr., and Mr. Morris J. Warren to the research staff. Mr. Pentz is a graduate of the University of Maryland and formerly was with The Davison Chemical Corporation. Mr. Warren joins Alcolac from The Army Chemical Corps. He, too, attended the University of Maryland.

Company expansion has also created an opening for a man experienced with surfactant applications. As this will be a key position, an outstanding man, 30-35 years of age, capable of expanding this activity, is required.

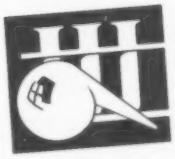
BRIGHT FUTURE SEEN FOR TALLOW ALCOHOL SULFATES

Tallow alcohol sulfates offer an opportunity to some companies to obtain the advantages of alcohol sulfates, at relatively low costs. The somewhat lower solubility of these compounds at room temperature has restricted their use in the past. Alcolac has found that this disadvantage can be overcome by combining the tallow sulfate with alkylarylsulfonates or lauryl sulfate. At higher temperatures of use, the tallow sulfate is entirely satisfactory even without solubilizers. The softening effect is especially desirable in some applications.

American Alcolac is now offering a saturated tallow sulfate under the name FASS TS in commercial quantities. Samples and descriptive literature are available on request.

NEW FATTY ALCOHOL SULFATES DEVELOPED BY AMERICAN ALCOLAC

Outstanding foaming properties in presence of fats a feature



With the pressure of competition steadily increasing, improved properties in raw materials used can be of special advantage. Alcolac has broadened its line of technical grade alcohol sulfates (SIPEX's)to make available several new salts—the potassium, magnesium, calcium and zinc. Of these, the magnesium and potassium appear to have outstanding commercial possibilities and are now available in large quantities. Both have unusually good foaming properties, particularly in the presence of lanolin. In addition, the potassium salt, (SIPEX K) has a relatively low solubility, suggesting its use in soap and synthetic bars. The magnesium salt, (SIPEX M) on the other hand, is extremely soluble, giving it a cloud point as low as 0°C. It also has unusually good dispersing properties for many solids. Additional details will be supplied upon request.

ALCOLAC EXECUTIVES ATTEND WORLD SURFACTANT CONGRESS

Mr. V. Blinoff, President and Mr. S. Giers, Technical Director, traveled to Europe to attend the World Congress for Detergency. Mr. Blinoff will have the duties of president of the sessions on metal cleaning.

NEW BOOKLETS AVAILABLE

A booklet summarizing the latest technical information on the SIPEX's is now available. The booklet contains extensive information on the physical and surface active properties of these products and includes a description of other fatty alcohol sulfates offered by Alcolac as well.

It seems that the products of Alcolac are better known than the company. A new booklet has been prepared describing Alcolac, its background and its facilities. Send for free copy.

CLIP AND MAIL THIS COUPON

AMERICAN ALCOLAC CORP. 3440 Fairfield Rd. Baltimore 26, Md.

Please send me, free of charge:

☐ Samples and information on use of Sipex in .....

☐ Booklet on Sipex ☐ Booklet on Alcolac

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COMPANY: .....

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Track down the right fragrance for your product. And you can do it by calling our nearest office. Our experts will gladly search from Abyssinia to Zanzibar for the *one* fragrance that whispers "buy" to your prospects.

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SOAPOLS—For bar, paste and liquid soaps.

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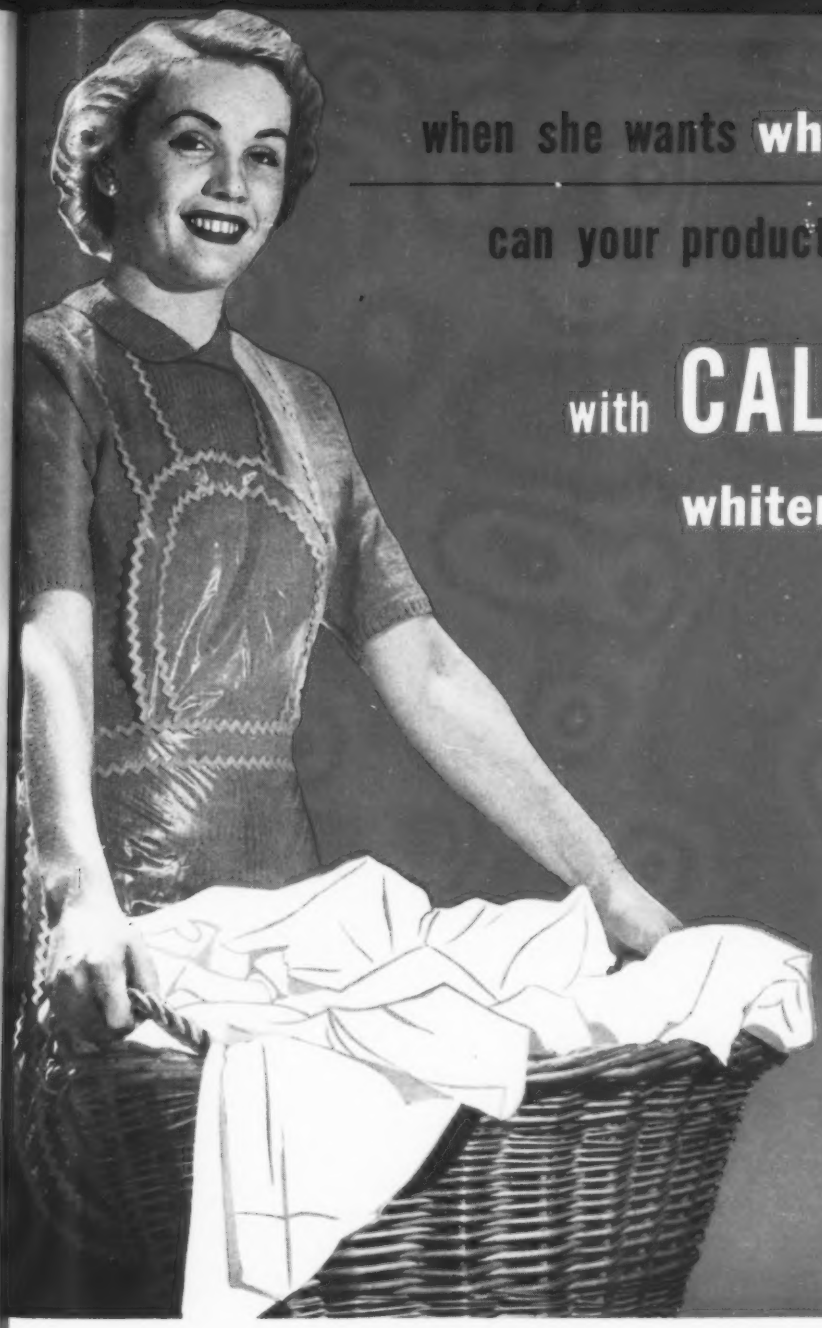

when she wants whiteness...

can your product deliver it?

with CALCOFLUOR* whitening agents—YES!

Detergents, powder bleaches, acid sours—such products acquire maximum whitening power with the addition of a CALCOFLUOR Whitening Agent.

And this extra whiteness pays off ... in satisfied users who will continue to buy your product and tell others about it.

Select the CALCOFLUOR best suited to your product and its purposes, and depend on it for maximum whitening action.

	Hue of White on Fabric	Bleach Fastness	Effect on Color of Soap Product	Substantivity
CALCOFLUOR WHITE B Conc.	neutral blue	good	slight yellowing	cotton, viscose
CALCOFLUOR WHITE MR Super Conc.	slightly reddish blue	fair	whitens	cotton, viscose
CALCOFLUOR WHITE 4B Conc.	slightly greenish blue	excellent	no effect	cotton, viscose
CALCOFLUOR WHITE 2R Conc.	slightly reddish blue	good	slight yellowing	cotton, viscose
CALCOFLUOR WHITE M2R Super	slightly reddish blue	fair	whitens	cotton, viscose
CALCOFLUOR WHITE SD	neutral blue	fair	strong whitening	nylon, acetate, wool, orlon
CALCOFLUOR WHITE LD	neutral blue	fair	strong whitening	nylon, acetate, wool, orlon

*Trade-mark

Write for further details and samples.

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It might be heavenly for the moon but it would be sheer lunacy to try it in business . . .

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HIGHER ALIPHATIC ALCOHOLS	*by high pressure hydrogenation*	**LAUREX** BRAND
LAURYL ALCOHOL and homologues	*by vacuum fractionation*	
SODIUM LAURYL SULPHATE	*spray dried powder to USP & BP specification*	**EMPICOL** BRAND
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ALTIES

After Closing . . .

F. J. Polak Dies in Crash

Frits J. Polak, president of Polak's Frutal Works, Inc., Middletown, N. Y., was killed when a

Frits J. Polak

KLM Royal Dutch airliner on which he was bound for New York, crashed into the River Shannon, near Shannon Airport, Ireland, Sept. 5. Mr. Polak was returning from a three weeks' stay in Europe where he had attended the 40th anniversary of the founding of the company in Amersfoort, Holland.

Mr. Polak, who was 39 years old, had succeeded his father, Jac. Polak, as president of Polak's Frutal Works, Jan. 1, 1954. Jac. Polak, who was the founder of the company, became chairman of the board, at that time. The son had been with the firm for over 20 years, having joined it upon the completion of his education abroad. He came to the United States in 1940, and later served with the U. S. Army for several years in the intelligence branch. He entered the army as a private and held the rank of captain upon completion of his service.

In addition to his father and mother, who flew back from Europe early in September, Mr. Polak is survived by his wife and two children and a brother, Bernard, who is vice-president of Polak's Frutal Works.

—★—

Kirk Velsicol Sales Head

John F. Kirk has been appointed vice-president and director of sales of Velsicol Corp., Chicago, it was announced Sept. 1., by E. T. Collinsworth, Jr. vice-president and general manager. Mr. Kirk has been connected with Allied Chemical and Dye Corp., New York, for many years as manager of its General Chemical Division's Philadelphia district. He was previously manager of the firm's General Agricultural Chemical Department in New York.

Mr. Kirk will direct sales of Velsicol Corporation's products including the household and agricultural insecticides, chlordane, heptachlor and endrin, also industrial and insecticide solvents, as well as saturants and industrial resins.

He succeeds H. D. Whamond, former Velsicol vice-president and general sales manager, who has been transferred to the parent company, Arvey Corp., Chicago, manufacturers of merchandising displays and specialties in paper, fiberboard and cellophane. Mr. Whamond, effective Sept. 1, became vice-president in charge of industrial laminations.

John D. Kirk

Velsicol's insecticide and industrial salesmen and technical service representatives are stationed in principal consuming areas throughout the country. The divisional sales manager for insecticidal and industrial products are Dr. W. Roth and Andrew Shore, respectively.

—★—

Sprayer Assn. Elects

Philip L. Hauser of Root-Lowell Manufacturing Co., Chicago, was reelected president of the National Sprayer & Duster Association at its ninth annual convention at Port Clinton, O., recently. Other officers elected at the meeting are: E. M. Myers, F. E. Myers & Bro. Co., Ashland, O., named vice-president, and D. P. Lewis, H. D. Hudson Mfg. Co., Chicago, reelected treasurer. These officers and the following were named to the executive board: T. M. Burton, D. B. Smith & Co., Utica, N. Y.; R. B. Chapin, R. E. Chapin Mfg. Works, Inc., Batavia, N. Y.; R. W. Merritt, Root-Lowell Corp., Chicago, and R. M. Yoder, Dobbins Mfg. Co., Elkhart, Inc.

—★—

Erlen Names Kirby Sales

Erlen Products Co., Burbank, Calif., recently announced the appointment of Kirby Sales Co., Los Angeles, as their sales agents for the states of California, Arizona and Nevada.

Erlen has manufactured sanitary chemicals for the jobbing trade since 1930. Its line includes soaps, waxes, disinfectants, cleaners.

H. D. Whamond

Opens Greenville Lab.

Union Bay State Chemical Co., Cambridge, Mass., recently announced the opening of a development laboratory, sales office and warehouse at 15 Gordon St., Greenville, S. C. Ray Boggs will manage the development laboratory. Sales service will containue to be handled through the company's representatives, William Miller and Byrd Miller, Jr., of Byrd Miller & Sons Co.

—★—

Westcavo Changes

The appointment of Arthur F. Smith as manager of sales and Preston F. Tinsley, assistant manager of sales, Westvaco Chlor-Alkali Division, Food Machinery & Chemical Corp., New York, was announced recently by Franklin Farley, president.

Westvaco Chlor-Alkali Division now sells chlorine, caustic soda, caustic potash, soda ash, carbon bisulphide, carbon tetrachloride and grain fumigants manufactured at its South Charleston, W. Va. and Westvaco, Wyo., plants. These chemicals were previously sold for it by Westvaco Chemical Division which now has been inactivated.

At the same time, it was announced that Donald C. Oskin has been appointed manager of sales and James R. Harris named assistant manager of sales, Westvaco Mineral Products Division, FMC.

Westvaco Mineral Products Division now sells sodium phosphates, phosphoric acid, barium compounds and magnesium chemicals manufactured at its Cartaret, N. J., Lawrence, Kans., Pocatello, Idaho, Newark, Calif., and Modesto, Calif. plants, formerly sold by Westvaco Chemical Division.

—★—

Dr. Valko in Europe

Dr. Emery I. Valko, director of research of Onyx Oil and Chemical Co., Jersey City, N. J., is visiting scientific and industrial organizations in Europe, where he spoke at the Paris Detergents Congress.

Probably the first time a sanitary supply jobber has shown his wares in the window of a bank took place at the First National Bank in Buffalo, N. Y., recently. Buffalo Kay Chemical Co. was the first sanitary supplier in Buffalo to be invited by the bank to display its merchandise in the street window at the main entrance of the bank. The bank permits its customers to display merchandise they make or sell in this fashion. The display can be seen from inside the bank, from the foyer and from the street outside.

Edward M. James

James Leaves Lever

Edward M. James, since 1953 technical advisor for Lever Brothers Co., New York, has just announced his resignation to enter the field of private consulting work. He had been with Lever since 1937, when he joined the firm as supervising research chemist. He later became chief supervisor and general supervisor of research.

In August, 1950, he was transferred to Lever's general administrative offices in New York City as assistant technical advisor. In Nov., 1953, he was appointed technical advisor, continuing in the capacity until his retirement.

Mr. James, who was associated with Procter & Gamble Co., Cincinnati, and Sharples Specialty Co. in various capacities, before joining Lever, will maintain his office and residence at 410 Swarthmore Ave., Swarthmore, Pa. He is a past president and a member of the governing board of the American Oil Chemists Society. Mr. James is a specialist in edible oil refining and processing.

—★—

DCAT Hears Ching

Cyrus S. Ching, chairman of the Atomic Energy Labor-Management Relations Panel and former director of the Federal Mediation and Conciliation Service, will be guest speaker at the 64th annual meeting of the Drug, Chemical and Allied Trades Section of the New York Board of Trade, held Sept. 23-25 at Pocono Manor, Pa.

—★—

Pacifico on Detergents

Carl Pacifico, director of development for American Alcolac Corp., Baltimore, spoke on "Surfactants for Textile Applications" at the symposium on textile chemicals during the 126th national meeting of the American Chemical Society held Sept. 12 to 17 in New York.

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A New Standard for Premium Grade Caustic Potash

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New Standard! Whiteness

Now for the first time—a reagent grade of caustic potash at a *price no higher than ordinary premium grade* low chloride material.

SOLVAY *mercury cell* Caustic Potash has only *trace quantities* of chloride or metals and chlorates are not detectable. This new material is produced in 2 forms: in pure white flakes, 90-92% and liquid 45%.

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SANA-KLEEN T-77

Automatic

TOILET BOWL CLEANER

Banishes an Unpleasant Task

Cleans automatically by chemical action . . . no scrubbing needed. One block in flush tank each week stops odors, stains, dullness. 24 blocks to carton. Also available in tubes of 12 blocks. Private label, on either package, on orders of 4 cases or more.

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Outstanding Seller for Every Public Use!

Most popular size and shape, for urinals and general use. Made to U.S. Navy specification MIL-D-2178. Attractive cellophane wrap and special tube containers protect from evaporation. In pleasant Surf, Lilac and Rose colors. Economical—long lasting.

PURO SANA-BOWL DEODORANT

Extra Profits from This Exclusive Specialty!

Banishes odors at their source. Patented "Snap-on" wire hanger holds cake securely in bowl and practically out of sight. Delicate flower-like fragrance. Ideal for home, hotel and public toilets—a much larger market than urinal blocks. 4-oz. cake.

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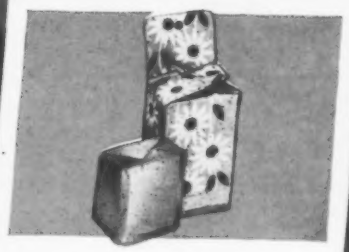

Heavy Duty Hanger Blocks

By popular demand, now available in 8, 12, 16 and 24 oz. cakes which are effective longer over a larger area. The three larger blocks come in convenient hanger containers. Cellophane wrap prevents evaporation before use. In pleasant, refreshing Surf, Lilac and Rose fragrance.

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(Established 1929)

FAMOUS LIGHTHOUSES OF AMERICA

BOSTON LIGHT, America's first lighthouse, was built in 1716 at the north side of the entrance to the main ship channel in Boston Harbor. The scene of several bitter contests for possession during the Revolutionary War, it was destroyed by the British in 1776. A new tower for this famous light was built in 1783 and is still in use today.

Guiding Light to users of electrochemicals is the integrity of Niagara Alkali Company, for over fifty years a pioneer in the development and production of these important materials. You can rely on Niagara for quality in...

Nialk® Liquid Chlorine, Nialk Caustic Potash, Nialk Carbonate of Potash, Nialk Paradichlorobenzene, Nialk Caustic Soda, Nialk TRICHLORethylene, Niagathal® (Tetrachloro Phthalic Anhydride)

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Drugs . . . More versatile than most generally used solvents, propylene glycol dissolves many pharmaceutically active substances. Consider it as your choice when preparing tinctures, solutions, and elixirs.

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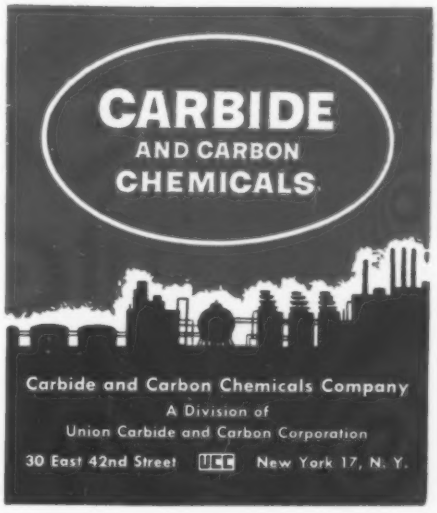
Whatever your use, propylene glycol from Carbide and Carbon will give top performance at your command. For further information write for your copy of the "Emulsions Booklet," (F-4186). Offices in principal cities. In Canada: Carbide Chemicals Sales Company, Division of Union Carbide Canada Limited, Toronto.



Dependable Source for Chemical Raw Materials

Elmer Luckow (right), chief soap chemist for the Allen B. Wrisley Co., discusses benefits of Pluronics F68 with William Lieb

"Our 12-year search ended when we learned about Pluronic F68"

— William Lieb, chief cosmetic chemist, Allen B. Wrisley Co., Chicago

"For 12 years we searched for a nonionic, low-foaming, nonirritating surface active agent in solid form," says Chief Cosmetic Chemist William Lieb, Allen B. Wrisley Company, Chicago, makers of fine soaps and toiletries since 1862.

"We tested literally hundreds of products. None of them filled the bill. Then the Wyandotte representative suggested Pluronic F68. We found it fitted our needs exactly. There is no way of measuring in dollars the value of a development like this.

"We use other Wyandotte products, too. As a matter of fact, we have been buyers of Wyandotte Soda Ash and Caustic since World War I. Deliveries have always been prompt; quality excellent. Wyandotte is big enough to handle our largest orders and give us expert technical assistance, yet small enough to provide personalized service and attention. We are well satisfied."

How about your business? Can you benefit by using some of Wyandotte's many products? Can you profit through Wyandotte's far-reaching developmental program and cooperative technical service? Contact our nearest district office, or write Wyandotte . . . we're glad to be of service. Samples of Pluronic* F68 are available upon request. *Wyandotte Chemicals Corporation, Wyandotte, Michigan. Offices in principal cities.*

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Soda Ash • Caustic Soda • Bicarbonate of Soda • Chlorine
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A strictly uniform product . . . readily available at attractive prices

If you've been "making do" with a substitute—you'll be interested to know that Swift & Company has *doubled its production* of Spermaceti USP.

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HY-PHOS* is the most efficient agent for water treatments in industrial processes

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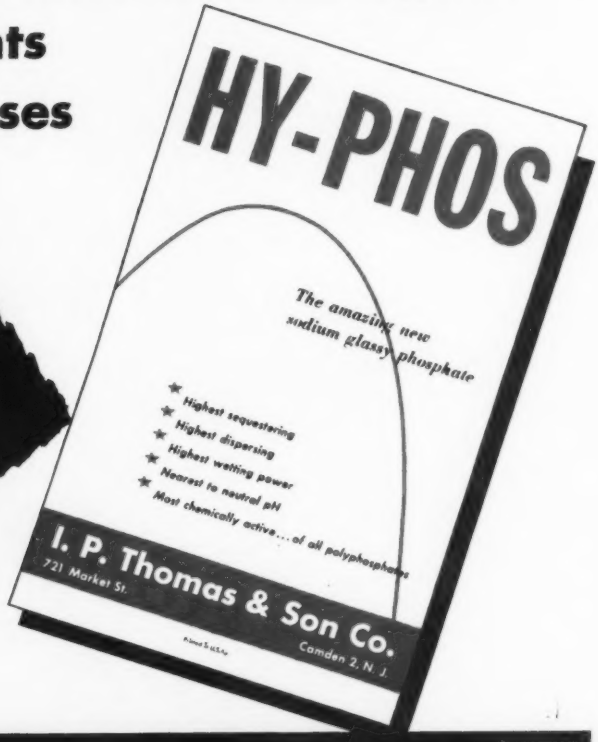

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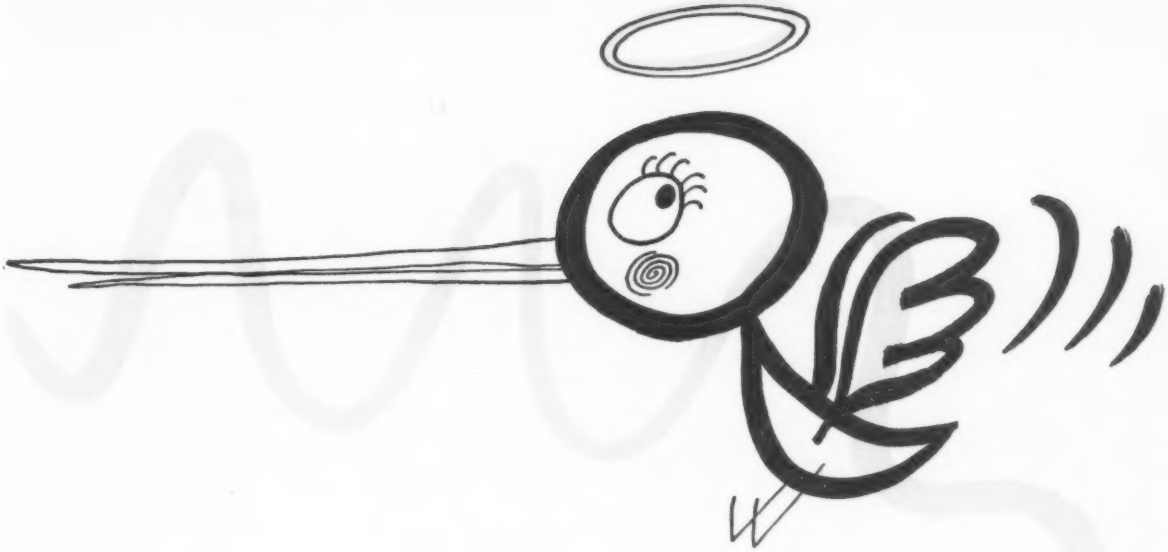

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DETERGENT SLURRY— for formulation — spray and drum drying.

SYNTHETIC OIL-SOLUBLE SULFONATES— various forms for many applications.

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...about detergents

SOAPS AND DETERGENTS

by E. G. Thomsen and John W. McCutcheon

THE latest and only complete American book on soap manufacture. Primarily a practical book for the production man, chemist, or executive, it covers such subjects as soap making methods, equipment and machinery, raw materials, perfuming and coloring, glycerine recovery, and properties and applications of finished soap and detergent products. No soap or detergent laboratory, plant, or office should be without this standard volume.

SYNTHETIC DETERGENTS

by John W. McCutcheon

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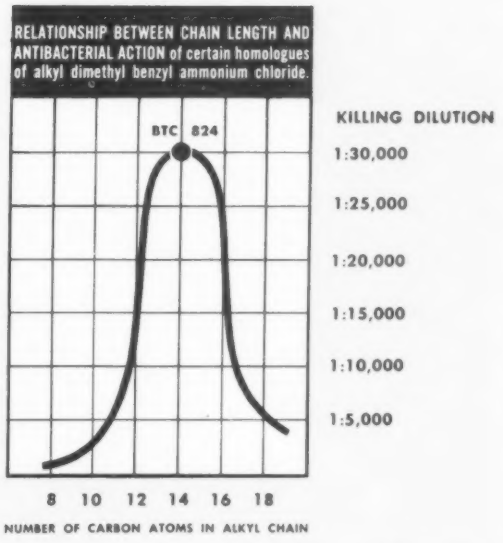

Composite curve based on data obtained with Salmonella typhosa and Staphylococcus aureus.

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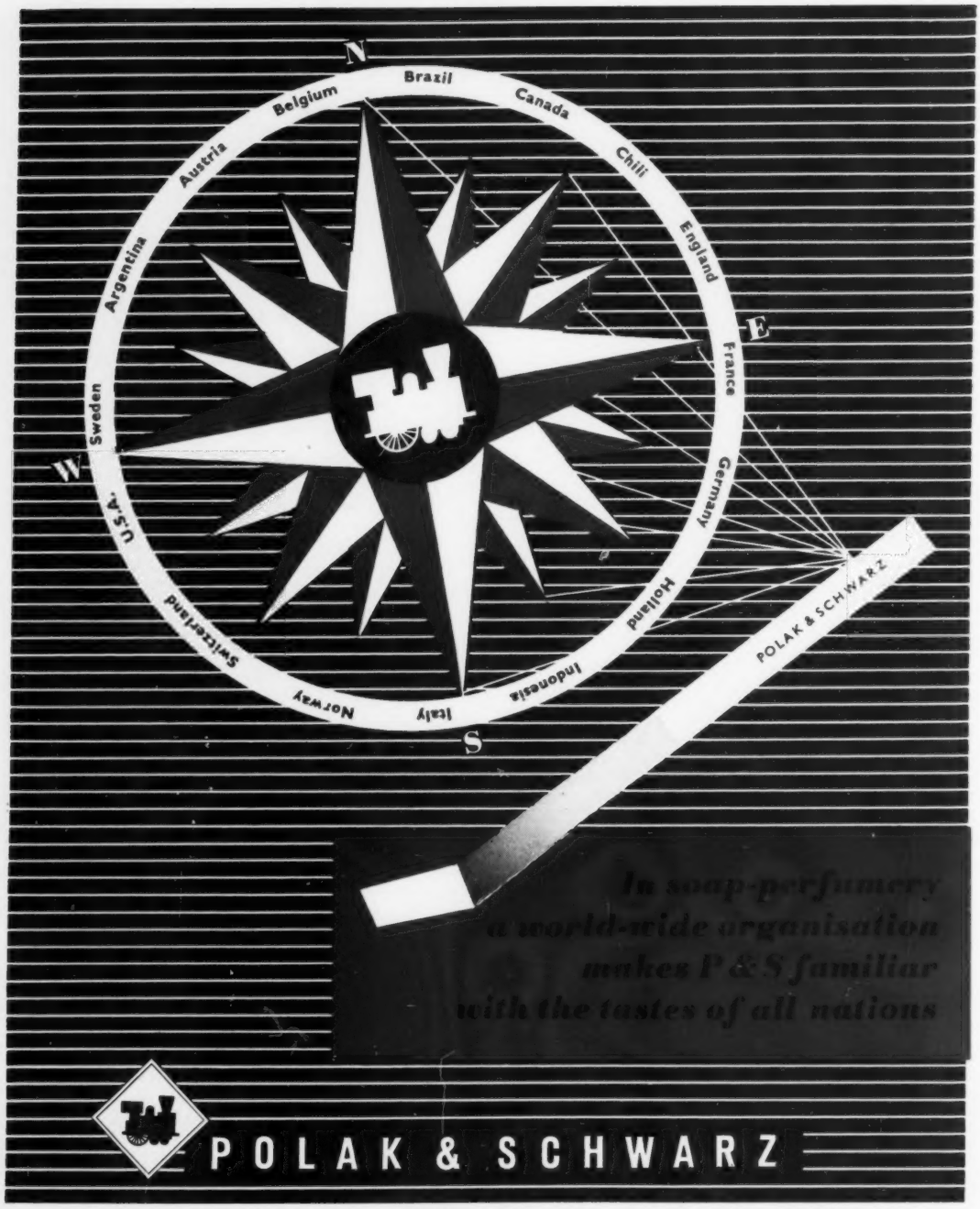
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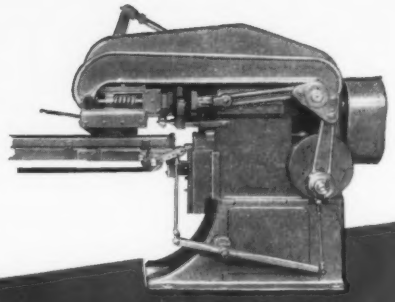

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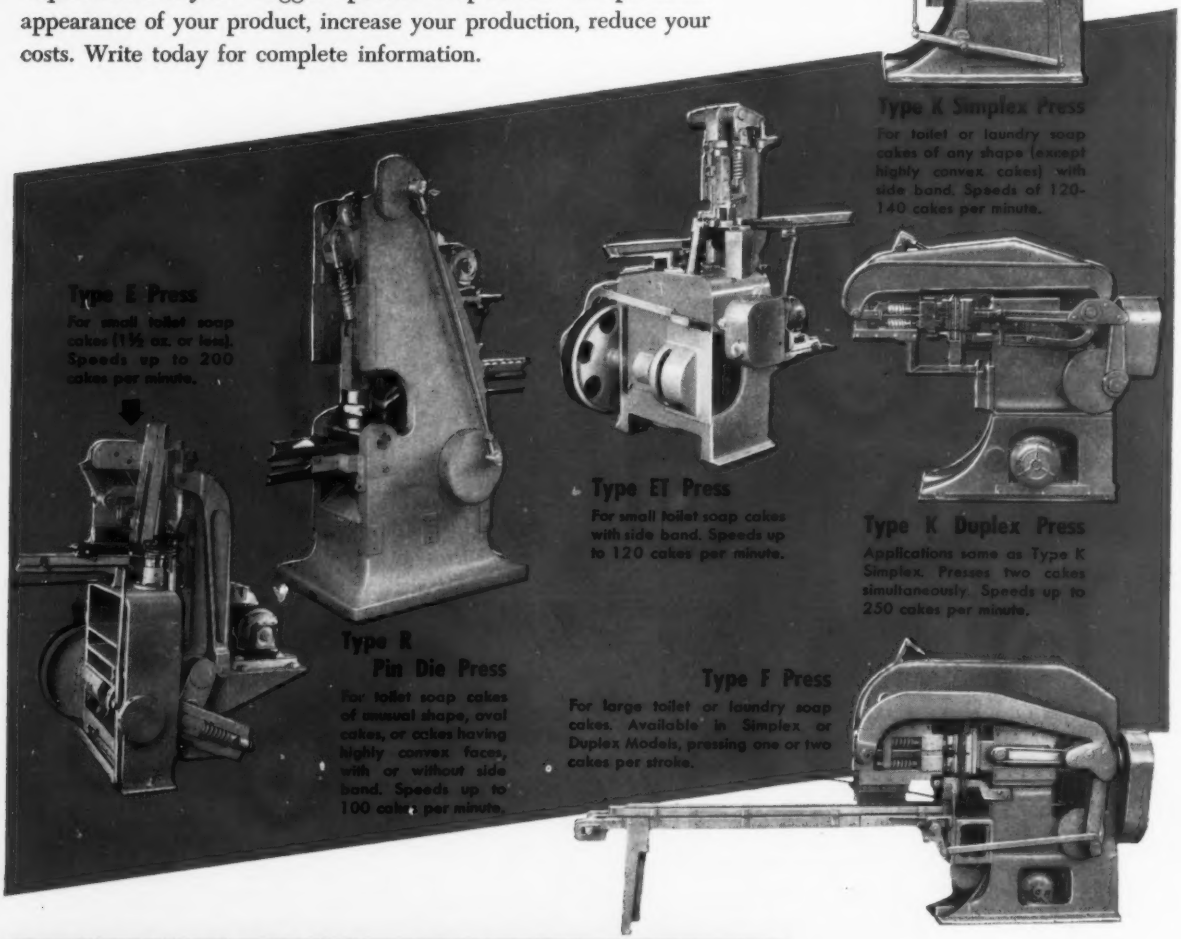

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. . . in brief

as the editor sees it

RED-HANDED . . . Synthetic detergents are taking a bum rap on charges of causing dishpan hands and other assorted skin ailments. Like the phoney charges whipped up in certain newspapers against DDT "poisoning the nation," the absence of supporting evidence does not deter the uninformed, the misinformed, and those with an axe to grind from pointing a finger at detergents. Producers of detergents and soaps are nettled, but not visibly worried because they know that dermatitis among housewives is no more widespread than in the past.

Some dermatologists and toxicologists who also hold that much dermatitis is caused by industrial irritants, would seem to be taking both sides of the same question. Dermatitis prevention? Barrier protective creams so that the user will be sure to use soap and water to wash off the protectants,—and the irritants. Dermatological opinion in this type of case holds cleanliness is the best preventive.

Dermatitis arising from home use of detergents or soaps is minor compared to industrial plants. In the latter, workers in a hurry resort to harsh abrasives which are included in classifications as that of the National Safety Council as "soaps and detergents." That these can and do injure the skin and possibly induce dermatoses is evident, but all detergents, soaps, hand cleaners are lumped in placing the blame.

While we feel that the products of the soap and detergent industry are an important factor in combatting dermatitis, we can't see that the industry helps its case with the public or with dermatologists in constantly harping on "dishpan hands," "detergent burn," "dangerous chemical cleaners," and the like. All this junky verbiage could well be tossed in the trashcan where it quite obviously belongs.

* * * * *

HAZARDS . . . Chemical specialties for both home and industrial uses which contain hazardous substances are now required to bear warning labels, according to a revision in the New York city and state health codes. The new labeling requirements were drawn up by state and city commissioners in conjunction with the Chemical Specialties Manufacturers Association and the Manufacturing Chemists Association and as such represent a sensible approach to the obvious problems involved.

What practical results will come from the new label requirements remain to be seen. Having observed the label reading habits of the American public for some years past, we are not too optimistic. Careless people are careless people whether in the home or in industry. Small children cannot read warning labels. Nevertheless, we sincerely hope that the new regulations are fully effective in reducing the dangers inherent in every hazardous product. Assuredly, they can do no harm; they may do good.

* * * * *

WAX RULES . . . Without fanfare and in a briefly-worded statement, the Federal Trade Commission has done in the long proposed trade practice rules for the floor wax and polish industry. After five or six years of haggling, wrangling and hair splitting, the current FTC has given another display of good horse sense and ended any further attempt to formulate a set of rules to "guide" the industry.

Attempts to formulate a set of "trade practice rules" for floor waxes, *et al*, were made time

and again in meetings between Commission representatives and the industry. As far as we can judge, the conferences never even got close to a set of regulations which were satisfactory to all parties and which had a small chance of working.

The industry never wanted any code or rules in the first place, but back about ten years ago, the "trade practice rules" fad got under way at FTC. When it came to floor waxes, the industry went through the motions of going along, as it obviously had to. Now, an enlightened Commission, apparently seeing the hopeless futility of the whole thing, has ended the farce.

* * * * *

FAULTY . . . Recently, we have bumped into three more aerosol products which are not going to make much of a hit with the housewife, nor do aerosols in general too much good. It so happens all three are insecticides and not products of small, little-known manufacturers, as one might suspect. The insecticidal efficiency of one was conspicuous by its absence. The odor of the second was reminescent of stale paint, really offensive to a dozen persons who sniffed it. The third recommended also to kill ants and roaches could be sprayed only upward, not down.

These are not products of small outfits hastening to scramble on the aerosol bandwagon. They are products of companies who should know better if they don't. They and other products like them can hurt the progress of the aerosol industry. They can give their marketers an enduring black eye. But what puzzles us most of all is how experienced merchandising outfits can ever let products like this get to market in the first place. Really a puzzle.

* * * * *

COURAGE . . . Among industrial soap producers, the basic assumption these many years seems to have been that if you ship enough stuff, by some hook or crook you'll make some sort of a profit. Lately, it would seem that steadily climbing costs, especially packaging, shipping and general labor, have made any such assumption more foolish than ever. The rise in costs continues to outrace any increases in volume, and with soap prices stable at the moment, the real squeeze is on profits,—if any.

To raise soap prices to buyers whose volume and profits also have been reduced is not a very palatable dish for any soaper to face. But, since he is supposed to be in business not just for the exercise, it obviously is up to him to protect his own interests and explain that higher tallow, higher alkalies, higher packages, higher shipping costs can mean only one thing, higher soap prices. We cannot see that too much imagination is required to realize that it's this,—or else.

A general increase in soap prices, more or less traditional at this time of the year, is anticipated by most soapers. To the supplier of industrial soaps who has been taking it on the chin these many moons, such an increase would be doubly welcome in the light of a realistic appraisal of his profit and loss statement. Now, if individual soapers would forget their competitive jitters and work up enough courage to act . . .

* * * * *

SUGAR . . . In the near future, not only will it be perfectly safe for baby to eat or drink the detergent used for washing his clothes or the family dishes, he positively will smack his lips in enjoyment. Maybe Mrs. McGuff will have to hide the detergents and cleansers like the cookies so that little Petunia will not overindulge in these delectable goodies. If what the Sugar Research Foundation said recently in a press release can be taken at face value, new detergents from sugar are in the offing,—not only cheap detergents, but ones that taste good. This heralds the new age of "sucrochemistry" which we are about to enter. As of now, "petrochemistry" is old hat.

Because of its composition and structure, sugar should have almost unlimited possibilities chemically and rival natural gas and petroleum as a starting point. With this in mind, we hasten to warn our readers not to be left at the post in this sugar deal. When these good-tasting sugar-derived detergents are available, be ready, be alert. As a starter, we suggest a sort of combination product, say something like a cross between strawberry jello and a dish washing powder,—a two purpose product, good for dessert and washing the dishes. Phooey on these old-fashioned single-purpose products. In the new age of "sucrochemistry," they will be outmoded overnight.

as the reader sees it...

Calo, Not Calco

Editor:

We would appreciate it if you would correct the news item appearing on page 167 of your August, 1954 issue regarding us. This item should have read as follows:

"We are now offering acetone in tankcars, tankwagons, and drums. In addition, we have added the following to our Naval Stores line: Thanite which is used by manufacturers of aerosol insecticides and sprays, and anethol, camphene and alpha-pinene which are used by the essential oils industry."

Also, please note that the correct spelling of our company name is "Calo." You had it correct in the heading, but in the body of the story it was spelled "Calco."

John H. Calo Co., Inc.
John H. Calo, president

* * * *

We are glad to publish the corrections. Now all we have to do is to refer to Mr. Calo as "Mr. Calco" in this column and we might have a little gun play around this quiet and peaceful (?) editorial office.—Ed.

—— ★ ——

Spanish/English Dictionary

Editor:

We were interested to read in the "Soap Plant Observer" section of your July issue a reference by Mr. McCutcheon to publication of an English/Spanish vocabulary of soap and detergent terms published by E. T. Boehme.

We should be very much obliged if you could inform us whether this vocabulary is available for purchase and, if so, the price and to whom we should apply.

A. H. Boardman
Henry Simon, Ltd.
Cheadle Heath Stockport,
England

* * * *

Both Mr. McCutcheon and this publication have received a number of inquiries about this booklet, which was published by E. T. Boehme of Havana, Cuba. As soon as we can obtain a better address and the price, we shall be happy to pass them along to Mr. Boardman and any other readers who are interested. Actually the dictionary is simply a series of about 30 mimeographed sheets which are held together by staples. However, in the absence of a better dictionary, this work seems of considerable interest. Ed.

—— ★ ——

The "H" is Sounded

Editor:

I realize the "h" is often a silent letter, but perhaps its silence led to an error in the article, "Clear Detergent Shampoos," published on page 77 of the July issue. The patent on ammonium lauryl sulfate in shampoos was issued to Mr. Stephan—not Stepan Chemical Co., Chicago, as was stated. The ammonium salt described in the patent is our "Sipon L-20," as we were the first company to offer ammonium lauryl sulfate.

We realize that errors of this type cannot be avoided from time to time and sincerely appreciate the high quality of your magazine.

Carl Pacifico,
Director of development
American Alcolac Corp.,
Baltimore.

* * * *

Our apologies to reader Pacifico. The similarity of the names threw us. We'll be on the alert from now on. Ed.

—— ★ ——

Glycerine in Food

Editor:

We have read with interest the article entitled, "Glycerine Market Tightens" which appeared on page 73 of the August 1954 issue of *Soap and Chemical Specialties*. We felt that this article was highly informative; however, we should like to call to your attention a misconception regarding the suitability of Shell synthetic glycerine for use in foods. Your article states, "The CP grade synthetic can be used as a replacement for the natural in everything but foods and drugs."

Shell's glycerine does not, as yet, carry the USP label but we have hopes that it will be accepted by the *U. S. Pharmacopeia* in the near future. Our synthetic glycerine, however, is and has been widely used in the food industry in all applications where natural glycerine is suitable. Sanction of the use of Shell synthetic glycerine in foods and other similar products for human consumption was expressed by the Food and Drug Administration in a letter to us dated May 13, 1953, an excerpt from which we quote below:

> "From tests shown us we believe that you are justified in concluding that synthetic glycerine having the composition of that used in such tests is suitable for use in foods to the same extent as a purified glycerine from natural sources."

We trust that you will bring this matter to the attention of your readers.

G. W. Huldrum, Jr.,
General sales manager
Shell Chemical Corp
New York, N. Y.

—— ★ ——

Odorant or Deodorant?

Editor:

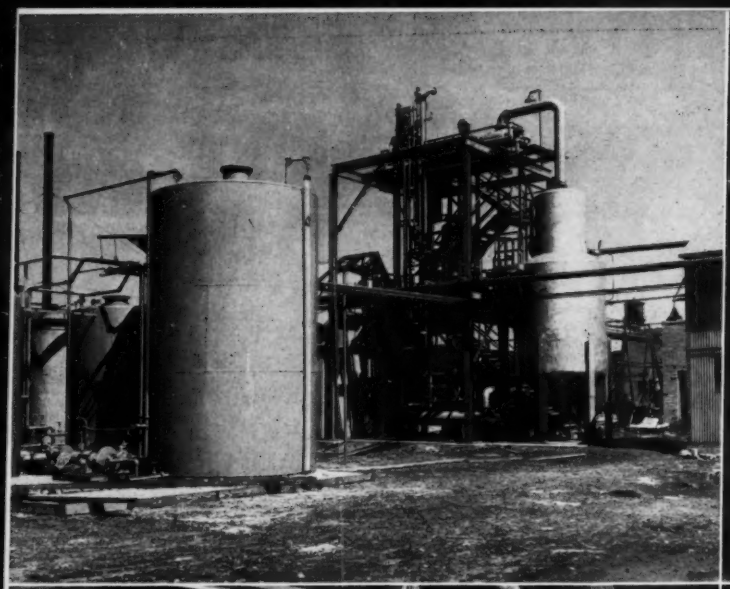
Referring to E. D. Kilmer's article "Soap and Detergent Perfumery," in the July issue of *Soap and Chemical Specialties*, I feel an inconsistency exists on page 36. The author, in explaining the test procedure to determine the behavior of each perfume material in the product, states: "A quantity of unperfumed powder is treated with a suitable concentration of test deodorant."

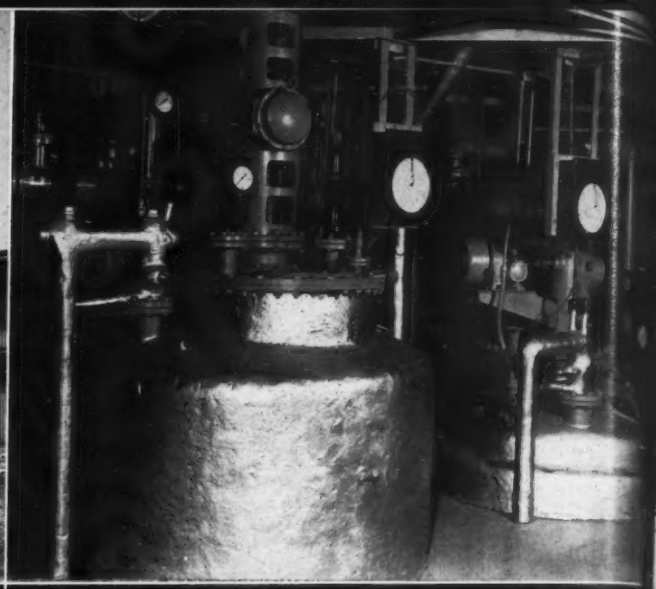
Should it not be "odorant" instead of "deodorant"?

Albert J. Walls,
Chemical engineer,
Cristal Yungay-Weir,
Scotty Cia. Ltda.
Santiago, Chile

It all depends upon your point of view. For many years perfuming materials for soap have been referred to as deodorants, in the sense that they

(*Turn to Page* 113)





Top left: A portion of the new Stepan Chemical Co. tank farm (left) and fatty alcohol distillation unit at right, which houses equipment shown in other photographs on this page.

Bottom left: A portion of the second story of the fatty alcohol plant showing, from left to right, solvent-fat blend tank, a reaction tank and quench tank.

Top right: Close-up view of quench tank, also shown in bottom left photograph, and solvent stripper (right). A portion of solvent stripper appears at extreme lower right hand corner of photograph at bottom left.

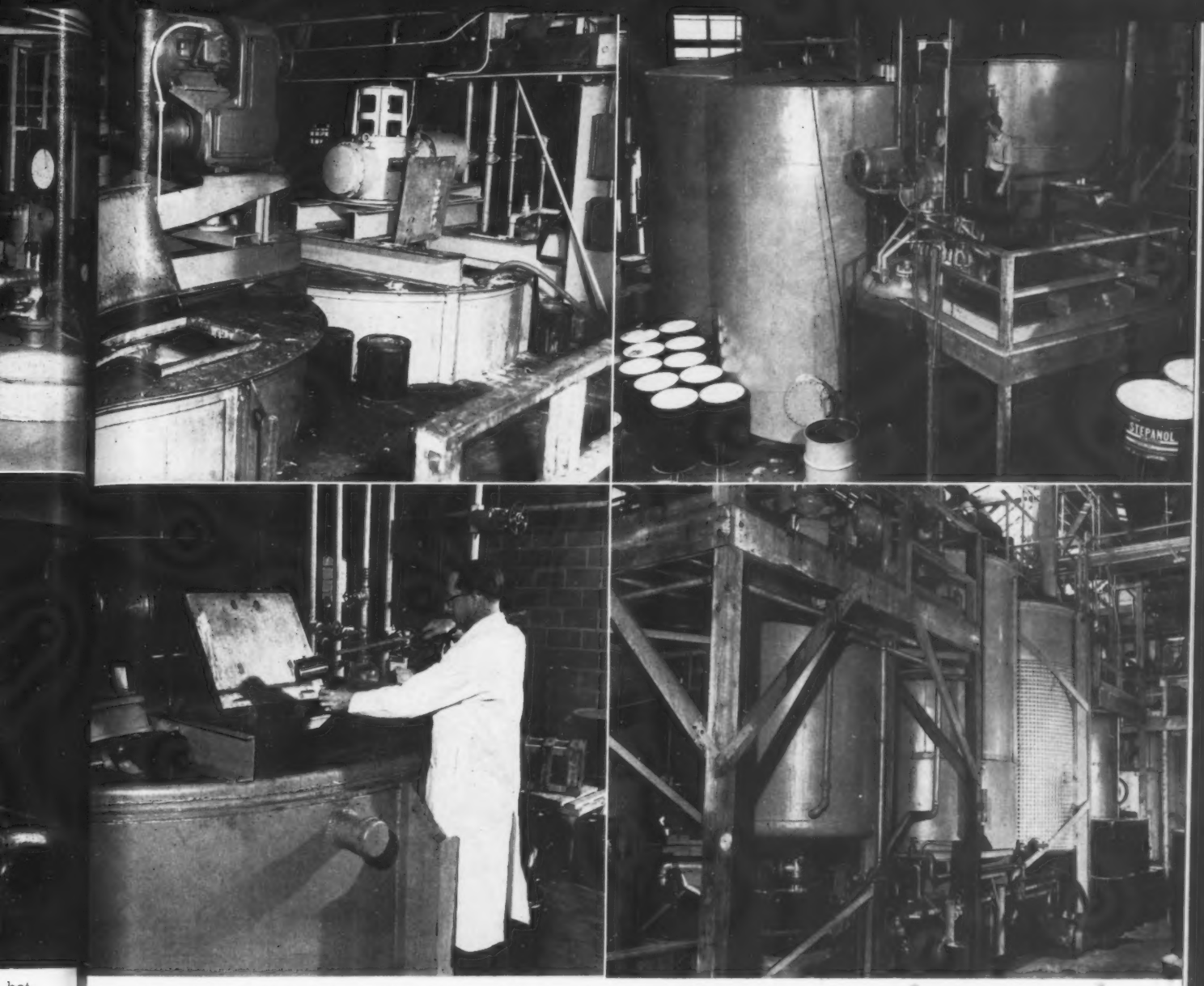
Bottom right: Weigh tanks, at left, and bottom of reaction vessels as they appear on ground floor of new Stepan unit.

New Stepan Fatty Alcohol Plant

STEPAN Chemical Co., Chicago, long a major producer of lauryl sulfates and other synthetic detergent base materials, is now producing higher fatty alcohols and fatty alcohol sulfates. The new Stepan fatty alcohol plant, which has been added to the company's production facilities at its 10 acre tract on Chicago's southwest side, has a presently rated production capacity of 4,500,000 pounds per year. Stepan is currently offering five fatty alcohols and two fatty alcohol sulfates from its line of fatty alcohol products. They are derived from tallow, soya, fish and linseed oils. Among the advantages claimed for these products over lower carbon lauryls and alkyl aryl sulfonates are better detergency, and improved emulsification, combined with low defatting of the skin.

The fatty alcohol production facilities are in addition to Stepan's plant for production of lauryl sulfates and other synthetic detergent base materials. The plant also houses research and laboratory facilities.

Tallow is converted by a



Top left: Blend tanks in the synthetic detergent base plant of Stepan Chemical Co., Chicago.

Bottom left: A Stepan technician samples detergent raw materials for routine control laboratory tests. Samples of each batch are retained for six months to two years, depending upon the particular product.

Top right: One of the reaction areas for the production of foam stabilizers. Stepan produces an alkylolamide for stabilizing foam for use in alkyl aryl sulfonates and fatty alcohol sulfate formulations where high foam stability is desired.

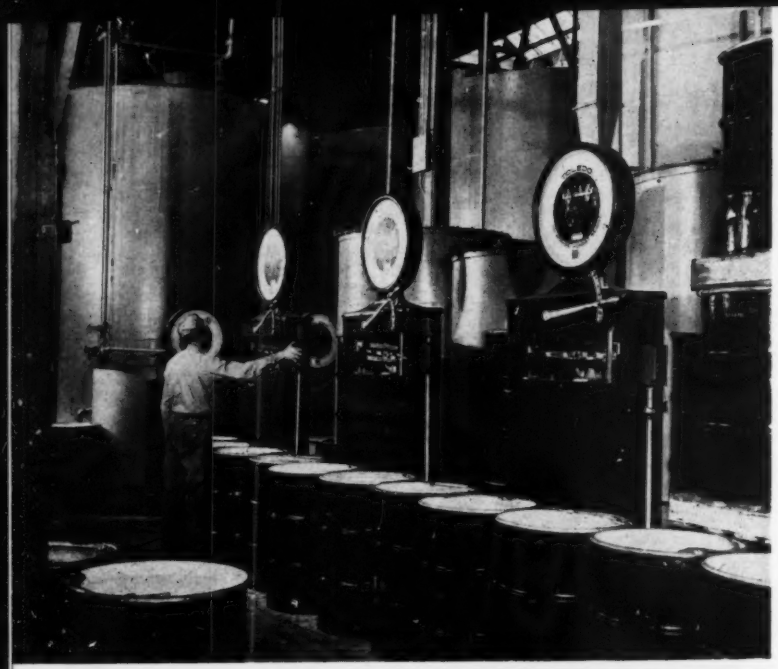
Bottom right: A battery of reactors as seen from the ground floor of the Stepan plant.

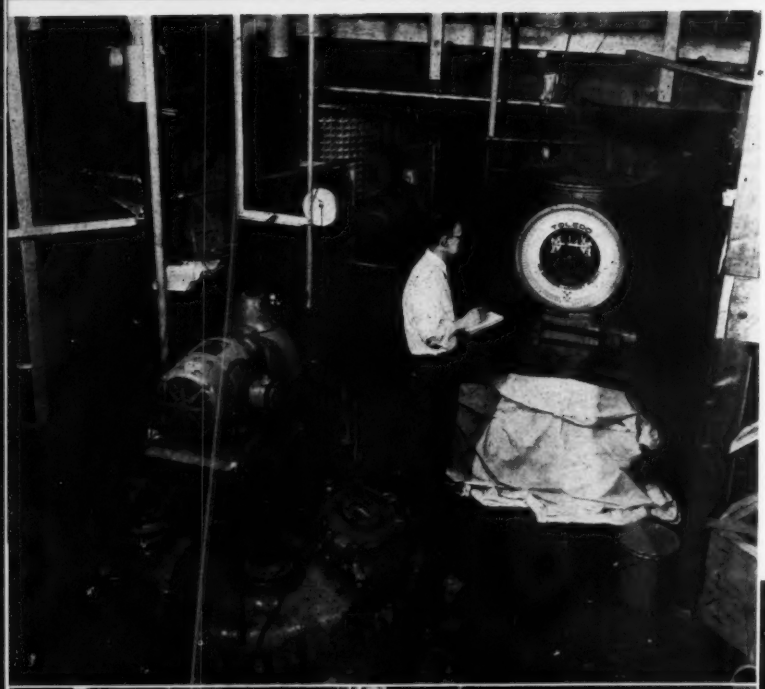
Puts Tallow to Work in Detergents

sodium reduction process which results in a mixture of about 68 percent stearyl and oleyl, 29 percent cetyl and three percent myristyl alcohol, which may be converted readily to sulfates.

The production of fatty alcohols from tallow for use as a synthetic detergent base material is a chemical phenomenon, since it was the inroads of the detergents in the soap field that played such havoc with tallow, the major soap fat. The tallow price factor, which is watched so closely by the soap industry, likewise will have a bearing on tallow use in fatty alcohol production. It is estimated that 200 million pounds of tallow may be used yearly for this purpose.

Besides the use of the new higher fatty alcohols and fatty alcohol sulfates in liquid hair shampoos, and in the conventional flake form products, Stepan has its eye on the bar form detergent idea. So far synthetic detergents in bar form have not shown up well in competition with toilet soaps. However, the lower solubility of tallow





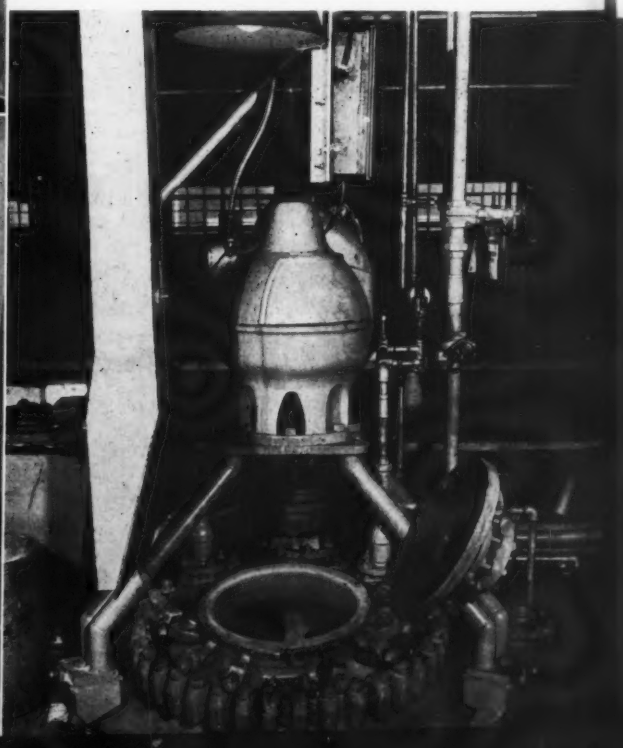
based fatty alcohols permits the use of less costly sodium salts in bar form detergents. Those presently marketed are either potassium lauryl sulphate or mono glyceride sulphate.

The Stepan fatty alcohol process involves heating a drum of solid cast sodium above its melting point by a Glascol mantle. The liquid sodium is weighed next and dispersed in toluene. Then the tallow mix is added to the sodium in an oil-heated reactor.

Next a charge of 300 pounds of tallow, 294 pounds of methyl isobutyl-carbinol and part of the 650 pounds of toluene used per batch is blended in a mix tank, weighed and discharged to the reactor. Some of the toluene is used to disperse the sodium. Stepan's new plant is scaled to batches requiring just one 490 pound drum of sodium for reduction for convenience and safety.

Reduction is carried out at the boiling point of the mixture (110-115° C.). Sodium and methyl isobutyl-carbinol react, and in five intermediate steps through ketal configuration, the tallow glycerides are reduced to fatty alcohols.

Following its discharge to a quench tank the mixture is cooled by water to about 90° C. Up to this point all vessels are blanketed with



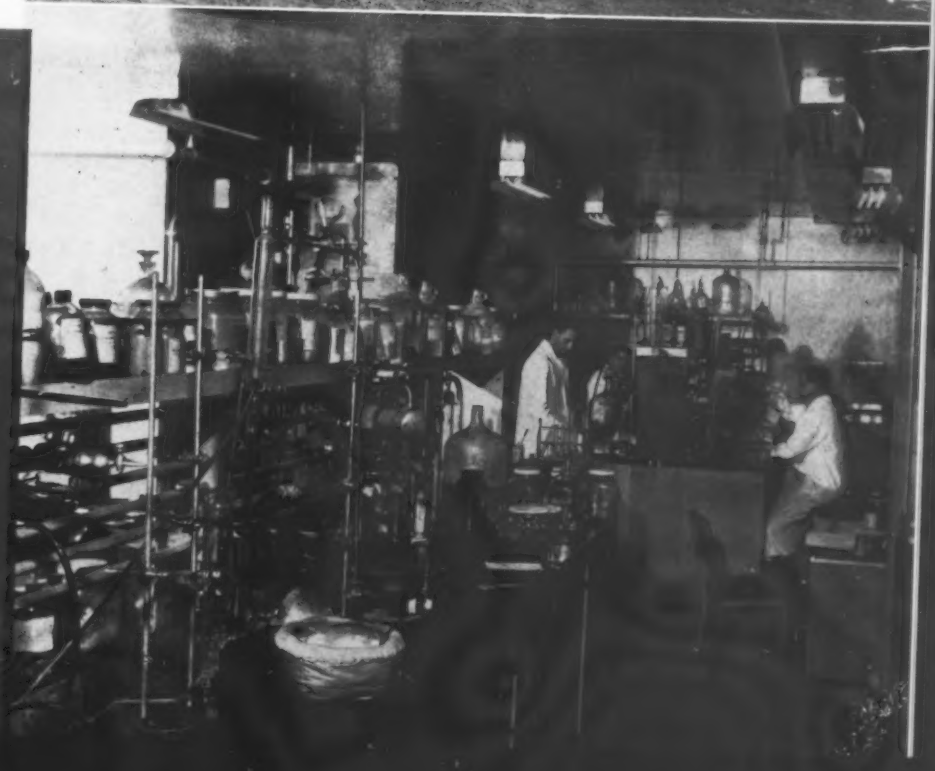
nitrogen. The emulsions in the mixture break when pumped to the settling tank. The lower layer of water containing caustic and glycerine is drawn off and sold as such.

The fatty alcohol-solvent mixture is then drawn off, washed and sent to the solvent stripping still. Stripping occurs at two stages: A ternary of toluene MIBC and residual water distills off at 85° C. and a toluene-MIBC mixture at 120° C. These pass through a dryer and are recovered for recycle use in charging the tallow mix tank.

Stripped fatty alcohols are drawn off to a Dowtherm-heated vacuum still operating at 220° C. and 10 mm Hg maximum. Bottoms are discarded now, but later, if usable, may be recovered.

Fatty alcohols distill to a boiling water condenser, condense at 100° C. and pass either to storage (held at 55-60°C.) or drumming. Yield of the plant is running around 85 to 90 percent.

The product is a mixture of fatty alcohols, percentages depending on the raw material used. A hydrogenated tallow would give a product roughly 68 percent stearyl and oleyl (C_{18}) and three percent myristyl (C_{14}). An unhydrogenated tallow would give 50 percent oleyl, 30 percent cetyl, 16 percent stearyl and four percent myristyl.



Facing page

Top left: Battery of weighing tanks.

Left center: A scene in the processing area.

Bottom left: Another view of the processing area.

Bottom right: Glass lined reaction kettle.

This page

Top right: Scene in the Stepan dishwashing laboratory, where detergents are tested and evaluated under actual use conditions.

Center right: Exterior of Stepan plant on Chicago's Southwest side.

Bottom right: A partial view of the Stepan research and development laboratory.

MARKET RESEARCH...

SHOULD we — in industrial marketing — plan to move forward or should all of our plans be laid to move backwards?

From a great deal of the discussion we hear today, one gets the impression that unless we can move backwards to the pre-World War II days of selling—the bottom is going to drop out of everything. All of us have heard variations of this statement many times—"Back in the 30's, we knew how to sell."—"Salesmen today are order takers—they don't know how to sell."

In the manufacture of industrial products, there has been widespread recognition of the continuing evolution, or continuing revolution, which has taken place and which is taking place in manufacturing methods and manufacturing procedures. We are all aware of the continuing development of various types of production specialists and production technicians, new developments in the field of industrial engineering, in time and motion study, and so forth.

There does not appear to be a widespread recognition of the corresponding evolution, or revolution, which has taken place and is currently taking place in the marketing of industrial products. In fact, there has been a great deal of material written about the inability of today's salesmen and the inability of today's sales management to sell products in a competitive buyer's market.

During the past fifteen years or so, the amount of actual selling which had to be done by the marketing division has varied widely in the many different fields. It may be true that in a few of the industrial fields, the sales organization has been engaged in allocating production. However, in most of the consumer fields and in most of the industrial specialty fields, sales organizations have been selling and some of it has been darn hard selling. Sales management has been improving their techniques and modifying their methods, in short, learning more and more about marketing. Even in those fields where the sales goals were set in the amount of goods which manufacturing could produce, we have had a great deal of continuing research in our markets and in marketing.

Because of the definite advances which have been made in marketing, even though they may not have been as readily defined as the advances which we have made in manufacturing, the problems which all of us face as markets become more and more competitive cannot be answered by a return to the sales management practices which were effective back in the 30's and prior to World War II.

The know-how required of the successful sales manager has been described in many different ways, but most of these definitions boil down to something like this:

1. You must know your customer.
2. You must know your prospect.
3. You must know your competitor.
4. You must know your product.
5. You must know your operating problems—the operating problems of the sales organization and the company's operating problems.

You may want to add to this list, or change the wording.

The function of our marketing operation of twenty years ago was dependent upon these same factors, just as it is today. The only difference, but a great difference, is that today, if we elect to, we can secure more and better information about the customer, about our prospects, more information about our competition and our competitive position, we can learn a great deal more about our products and we can get a far better understanding of our operating problems. I say "if we elect to"—if we choose to take advantage of the important advances which have been made in the development of new techniques and improved procedures for gathering information.

Market Research Defined

EVERY sales manager is consciously or unconsciously directing his sales activity on the basis of his interpretation of whatever knowledge he has of these five factors—customer, prospect, competition, product knowledge, and operating problems. The difference in effectiveness of sales managers or sales-management groups is, therefore, dependent upon two factors: (1) the extent of their information and the accuracy of this information, and (2) their ability to interpret that knowledge and use it. If this information, this knowledge we are talking about, is gathered and interpreted by the sales manager—we call such gathering and interpretation sales management. If on the other hand, this function of gathering information is performed by someone other than the sales manager, we are inclined to call it market research. Sure, this is an over-simplification, but I believe that there will be sufficient agreement with the basic point—that every sales manager, everyone who is directing a company's marketing operations, is actually performing market research—whether or not called by that title.

In industrial selling it can be an important management tool. It can tell you about your customer, prospect, competitor and even your own product. Market research can cost whatever you care to or can spend profitably.

By Arthur G. Tunstall, Jr.,*
Pennsylvania Salt Manufacturing Co.

Many different names have been given to this kind of activity. It has been called market research, marketing research, business research, economics research, sales research, promotion research, and many other things.

The important point is not what we call it, but the recognition that we are not talking about some new function—some new activity in which you might engage. We are talking about something that each and every company is already doing, each with its own degree of intensity and effectiveness.

Once we have cleared this hurdle, we can give serious thought to the real problems—the problem of how we can improve the extent of our knowledge and assure ourselves of the accuracy of this information. If we do this and if we then study our interpretation of these facts—then we can significantly improve our marketing operations.

Let's avoid the hassel of what we will call this study—what we are talking about is an objective approach to the problems encountered in the marketing of our products—problems in the broadest sense of the word. We are talking about this objective approach to problem solving as an alternative to using "hunches"—or what had sometimes been called "flying by the seat of your pants."

The tremendous advantage which we gain by this recognition of what we are talking about is, first, that we can begin to think about it, and secondly, that we can begin to organize our thinking.

The basic technique of this approach to problem solving is relatively simple and has been set forth as these five steps:

1. Define the problem.
2. Select a good sample.
2. Develop sound techniques.
4. Interpret the findings impartially.
5. Use the findings.

We can use this approach—through these five steps—to all of our problems of industrial marketing—whether the problem is one of the customer's likes and dislikes—whether the problem is to find out what is blocking your distribution channel at any given point, or problems in connection with the motivation of your salesmen, or the answer to any other of the multitude of questions you can raise about your business.

If you will go along with me thus far, it becomes apparent that we can avoid another big tangle—let's not try to draw a line between market research and sales management at this point. I believe we can agree that if we use the approach indicated by these five steps, we will obtain the most accurate information, and if we interpret this information properly, we can secure that which has sometimes been called "creative selling." We will secure the proper coordination of advertising, sales promotion, and the salesmen's activity, and these coordinated activities will be properly pitched so that each buying influence who affects the purchase of our products will be satisfied that our product is the one that will best answer his needs.

The scope of this activity which we will call market research will vary widely from one company to another. In general, the scope of activity in any single company will depend upon:

1. Management's understanding of its *own* problems.
2. Management's comprehension of what research *can* accomplish.
3. Management's definition of its own aims and the determination of what the research is expected to accomplish.

We can rarely draw a fine line between those problems we have in our business which are purely internal or those of our problems which are caused at least in part by some change in the business environment in which we are operating. Similarly, with many of our problems, we cannot draw a sharp line between manufacturing, marketing, engineering, etc., etc. A marketing problem—that of serving a new class of customer—might be readily solved by the introduction of a new package size. However, the introduction of the new package size may require new equipment in manufacturing—it may pose new problems in inventory—it may pose new problems in shipping, and so on. It will affect a great deal more of your total organization than the marketing people. Our business problems have this habit of rambling throughout the organization, and I believe it is this single fact which sometimes exist in defining the scope of market research and

*Paper presented before the 27th annual convention of the Association of American Soap & Glycerine Producers, Inc., New York, Jan. 28, 1954.

really is the reason this kind of activity has been given so many different names. Relatively few problems can be studied wholly within the marketing sphere, and so we face the choice of having all of the research in connection with a given problem being done by one person or group or whether we will split the problem up and give each of its parts to different persons or different groups.

For example, let's suppose that market research in the course of a study looking for new markets develops the information that a new market for our product exists among a class of customers we have not previously served. We can then ask the same person or the same people to develop what would be required in order for us to sell to this new market—to this new class of customer. If this work is then carried forward and it is determined that a new package size is required, we can again ask the same person who has thus far conducted this study to determine what the effects on the manufacturing operations will be if this new package size is actually authorized. On the other hand, we might take this latter step—determining the effect on manufacturing operations and ask an entirely different person to make this determination.

Because the solution of many of our business problems requires information from many different functional areas within our business. I do not believe there is any single formula which can be given you which will establish the scope of this type of operation within your company. It will be necessary that each of your companies determine the scope of your "market research" activities which meet your own company's needs.

This scope will be established by compromising what research you would like to have with what you feel you can afford to pay, what people you have or can make available and probably other factors.

In regards to this first point —*what research you would like performed*—a brief discussion of some of the kinds of research which can be performed may be helpful. Management encounters problems which lend themselves to solution via this research route, in sales, in production, in finance, and in general administration—but we certainly do not have the space, nor do I think we would want to cover—in one article—all of the possible research work that may be done in all of these general areas.

We can consider only a few of the problems in the sales area in which market research may function as a tool of management to facilitate solution of problems.

Because it ties in too many of the types of study already mentioned, I have not listed as a separate area that of the development of methods of measuring the effectiveness of the various parts of our marketing activities. The search for information which enables us to establish standards of performance and methods of measuring against the standard of the component activities of our marketing operations, is a never ending one. With more and better information we can better evaluate the effectiveness not only of units within our marketing activities, but also do a better job of evaluating the performance of individuals. We can certainly improve our direction of the individual salesman if the standards of performance we are using in measuring him are based on the actual conditions which exist in his territory rather than some broad "rule of the thumb." More specifically, do we know how many calls constitute a good day's work in his particular territory. Just how effectively can a salesman use the point of sale gimmick or the point of sale demonstration which he has been directed to use.

The techniques involved in making all of the kinds of studies listed are obviously a subject in themselves, and although we can't devote any space to them here, I would like to stress the very important advances which have been made in the techniques for gathering information about all of these various questions which you might ask of your business.

Even though we recognize this progress which has been made in the techniques of this function, we are still in the process of developing and learning how to use new techniques and considerable work must be done in the future, not only in the development of new techniques but in adapting these techniques to the needs of your own individual business. However, let's not wait until we have *the* perfect techniques for everything — let's utilize everything we can from what we have thus far learned of this subject of gathering information.

I hope some of this will be helpful to you in determining the scope of the market research activities which best fit your company's needs. After we have made this decision and have defined the scope of activities, then and then only can we begin to define the responsibilities of the individuals or the group we might utilize, and begin to think about the organization of this group.

Who Does Market Research?

SEVERAL excellent papers and books are available on organizing a market research department or group. This material will be helpful to you either in establishing market research as a new group within your company or studying the organization of your present market research group.

Earlier we said that every company is actually doing market research, whether or not they call it by that name. In determining who is to do this market research work on an organized basis, I believe you will find it helpful if you start off with the question—Who is actually doing the market research work now? The answer to this question will not only be helpful but may prove surprising. You may find that your market research is now being done by your president, your vice-president of sales, your sales manager, your controller—you might

How Market Research Can Function to Aid Management with Sales Problems

1. **The analysis of economic trends**
   This type of study would cover both short term forecasts and long term forecasts, but might also include such things as industrial growth studies.
2. **Measurement of sales potential**
   Research in this general area might include determination of the total market—sometimes called total industry sales—and be coupled with studies of your company's share of this total market. These total industry sales, or potential, may be further studied by individual market area or other geographic areas, including the individual salesman's territory. It can go further and include research to facilitate the establishment of sales quotas, either total, territorial, or by other units.
3. **Measurement of sales trends**
   Research may be used to determine the effect of sales policy changes on your company's industry position. We may also consider studies of competitive trends under this heading.
4. **Studies of product and packaging**
   Studies under this category can range all the way from seeking new uses for old products to a search for new products. Studies as to the effectiveness of your present package from the point of view of utility, advertising value, and many other aspects may be made.
5. **Analysis of distribution**
   Studies may be made of what portion of the total available outlets in the distribution channel you have attained. Studies may be made to determine what coverage your sales force is now making of distribution outlets. This can lead to studies as to the most efficient size of territory and to the determination of the type of outlets which are most profitable for your particular company.
6. **Analysis of profitability**
   It may be advantageous to you to study the profitability of particular markets—perhaps defined by industry lines, or determine the profitability of marketing areas. Depending upon your own internal accounting—studies may be required to determine the profitability of individual products within your product line. The profitability of definite territories may be significant or the profitability of certain types of distribution may be significant in your particular operations.
7. **Demand and price studies**
   Studies falling under this general heading may be an attempt to find correlation between consumer income and demand for your product, or similar correlations, but they may also include studies of demand versus price or even geographic differences in demand for your product.
8. **Analysis of competition**
   These studies may refer to competitive products—competitive prices—to studies of the volume of the competition—to studies of sales methods and sales policies of specific competitors. There may be other questions about your competitors that you would like to add to this particular list.
9. **Determining consumer reaction**
   A great deal of extremely constructive work has been done in determining the consumer reactions on the household products of the soap industry. A great many of the techniques and methods which have been developed will lend themselves, with some modification, to determining the reaction of the consumers of your industrial products. Studies as to product use—brand preferences—buying habits—the industrial consumer's reaction to your advertising theme and media, and many other reactions lend themselves to study.
10. **Determining dealer — distributor reaction**
    Studies may be made to determine what your distributor thinks of your sales policy, your credit policy, your product or package, and your sales force. Study will advise you not only what he thinks of your advertising, but may uncover what he feels he needs in the way of advertising support or what he needs to enable him to effectively use your advertising.
11. **Measuring advertising effectiveness**
    I am sure we can agree that this is always a difficult area and one in which it is particularly difficult to secure evaluation. Research can be of very real assistance with studies of readership, listening habits and so forth—studies of impact or recollection, identification studies and so on.

find that it is being done, at least in part, by your manufacturing people, or almost anyone in your organization. You may find, and probably will find, that more than one person is involved and maybe everyone has his finger in the pie.

After you find out who is doing it, then you can begin to ask questions like—Are they doing a good job? How can they do it better?

The organization which you finally decide best fits your needs should be "tailor made" by you to conform to the scope of operations which you have previously determined.

In many companies, particulary in small companies, but also in companies where the market research is being newly organized, both the organization and the scope of activities may be built around a particular individual. You may find this to be a very helpful approach. You can then gradually enlarge your market research activity and the scope of the activities as the particular individual develops and as market research as an organized activity secures recognition within your organization.

A few additional factors pertinent to the department's organization can be considered. Briefly, thought should be given to the amount of statistical accounting which is to be done by the department. A great deal of this work might be furnished to your market research department from your present accounting department.

Your market research department may have access to other service departments, such as stenographic pools, computation pools, tabulating departments, or others. You will have to determine what records are available from your company's library facilities, or records from the sales department itself.

A large department is rarely economical and certainly initially, the department should be kept small, with the department's growth being dictated by necessity.

Probably, before we have reached this point in our discussion, you have asked yourself the question—What will all of this cost? and perhaps we should discuss that aspect here.

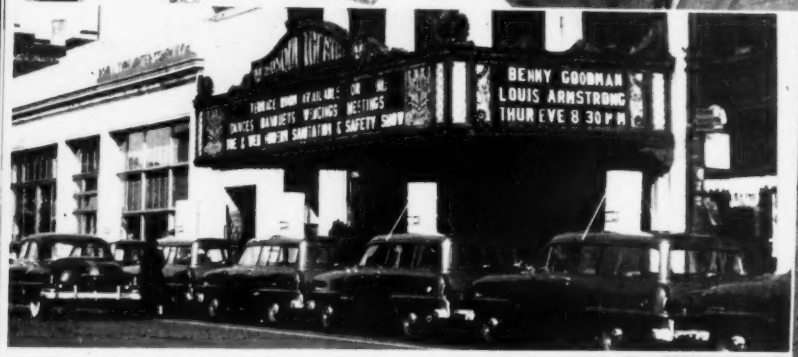
A great deal of information

(*Turn to Page* 114)

Counterclockwise, this page: Standard equipment carried by Formula salesman Frank Kellett. All Formula salesmen are provided with station wagons.

Formula's new 42,000 square feet, quarter-million dollar warehouse, showroom and headquarters office building at 99 Frelinghuysen Ave., Newark, New Jersey.

Miss Pearl Jacobson, Formula's telephone order sales



lady, Bill Fried vice-president and sales manager and Jack Hirsch, president and founder of Formula.

Newark's Mosque Theatre Building where Formula holds its annual show. 1? new Plymouth Station wagons lined up in front of building are used by Formula's salesmen.

The "Broom Man," Formula trademark on drums is familiar sight on all of Formula's more than 100 private brand items.

Newark's Mayor Ralph A. Villani draws for door prize during a recent Formula show. This year open house visits to new plant replaces the annual show.

Harold Leftcourt, vice-president in charge of dealer sales and bulk purchases for Formula.

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Formula's "Maintainer," external house magazine which Formula mails each month to its customers. Articles on how the sanitary supply firm's customers actually perform cleaning operations are featured in articles and photographs.

Formula Floor Products, Inc.

Formula's growth based on solving customer problems. Annual shows give nine year old Newark supplier chance to show many lines handled.

WHEN a Newark, N. J., druggist confided to the chap whose floor waxing service he was using that he, the druggist, could sell a line of furniture polish, the floor waxing service man confidently allowed as how he'd be glad to provide such a product.

"What'll we call it?," asked the floor waxer.

"Formula 49," answered the druggist, "and we'll sell it for 49 cents a pint," he explained.

"Formula 49" furniture polish thus came into being. But what was more important, the as then non-existent Formula Floor Products Co., whose name appeared as the manufacturer on the label of "Formula 49," was born.

The druggist is still operating his drug store on Bergen St. in Newark, but the floor waxer, whose name happens to be Jack Hirsch, has just moved the million dollar a year sanitary supply business he heads, Formula Floor Products, into a sprawling plant at 99 Frelinghuysen Ave., Newark, which boasts 42,000 sqaure feet of floor space. Nine years ago, when the business was begun, it occupied less than 1,000 square feet of floor space at its first address, 83 Elizabeth Ave. in Newark. A year and a half later Formula moved to 103 Elizabeth Ave., where it took over 5,000 square feet of floor space. Growth didn't stop there, however, and eventually the firm required the use of the entire 20,000 square feet of floor space the building at 103 provided.

Formula will play host to maintenance supply buyers and other guests at a three day house warming of its new quarter million dollar warehouse, showroom and headquarters office Thursday night, Friday night and all day Saturday, October 28, 29 and 30. The open house, which will feature a tour of inspection of the new Formula headquarters, takes the place of the annual showing of sanitary supplies and maintenance chemicals and equipment Formula has conducted in the exhibit hall of the Mosque Theatre Building in Newark, N. J. Last year, 1400 buyers and guests attended the show, and Mr. Hirsch is hoping an even greater number will be on hand for the open house and reception at the new headquarters.

Located at 99 Frelinghuysen Ave. in Newark's industrial section, the new building runs a full block between Earle and Poiner Streets. The building's 42,000 square feet of floor space is equipped with the latest stock handling and warehousing equipment. For the present, Formula will occupy 30,000 square feet of floor space, and will rent out the remainder, which is on the third flóor of the building. The offices are air conditioned. The show room is to become a sort of permanent sanitary supply show.

Besides its Newark headquarters, Formula has sales offices

in the State's capitol at Trenton and in Manhattan. In Bridgeport, Conn., the firm has a warehouse and sales office. The firm's territory runs from Trenton to Bridgeport, north and south, east to the metropolitan New York City area and as far west as the Pennsylvania State line. It also covers such upstate New York counties as Orange, Rockland and Sullivan. To cover this territory adequately, Mr. Hirsch feels he will eventually require the services of approximately 100 salesmen. The firm now has 16, including the two vice-presidents in charge of sales. This, of course, represents a 16-fold increase in sales personnel in the nine years since Formula was founded.

In addition to a vice-president in charge of sales to consumers of sanitary supplies and equipment for this and other maintenance purposes, Formula has a vice-president in charge of dealer sales. Dealer sales cover those items which are bought in bulk by Formula and reshipped in smaller quantitites to other dealers.

Formula for Growth

THE Formula formula for fast growth, lies in selling, but not the type of selling usually connected with the sanitary and maintenance supply business. Formula has not built its business on price. It has not built it by sacrificing a normal jobbing profit. It has never "bought" an order. The Formula formula rests squarely on an aim and purpose beyond the normal profit motive, this being, to solve commercial cleaning problems. Formula salesmen not only demonstrate cleaning materials and equipment, they ferret out problems and keep trying one method of cleaning after another until the best way to treat any given surface has been found. When that one best way has been established, the buyer places his order. Formula salesmen are not "high pressure." They do not live by their wits but by conscientious effort to solve problems. There is not a man in the group who doesn't spend more time with a pail and a brush or floor machine than with a catalog and price list. Herein lies Formula's power to grow and all other sales promotion efforts coincide with the basic aim and purpose.

Formula holds periodic sanitary shows to which maintenance men are invited. The aim and purpose of these widely attended shows, at which close to 100 manufacturers of sanitation and maintenance chemicals and equipment exhibit, is to aid the man behind the broom, and the man behind him, to inspect, try, feel, and use a wide variety of cleaning equipment and supplies. At these shows a maintenance man can run his hand over a hundred different brushes and find the one best fitted to his needs.

Last year 1400 buyers, purchasing agents, maintenance men, sanitary experts and safety directors attended the show in the exhibit hall of Newark's Mosque Theatre building.

Although all Formula salesmen travel in dark green Plymouth station wagons which are loaded to the roof with equipment and samples, it is impossible for them to carry the full Formula line of over a thousand items. The sanitary shows enable users of sanitation supplies and equipment to browse through the entire line.

In keeping with its basic aim, Formula publishes an originally written monthly magazine, called *The Maintainer*. In introducing this magazine two years ago, Jack D. Hirsch, Formula's president wrote, "There is little justification for another publication in the maintenance and sanitation field which merely tells — How to Do it. Building managers' libraries are loaded with volumes on how to housekeep industrial and public buildings. The field is knee-deep in hypothesis and theory. At the same time we feel there is a definite need for a publication which deals with How It Is Being Done. Actual case histories are presented in the *Maintainer* with facts and pictures. How many men do what for how much. How problems are solved. To fill this need we are publishing Formula's *Maintainer*. Formula is in a singularly strong position to gather and report such information. Our daily contact with 'The man behind the broom' in hundreds of institutions, factories, schools, churches, hospitals, and public buildings, will supply editorial material in abundance." And so it has worked out. Each issue of the *Maintainer* tells "how it is being done" as the salesmen bring in the stories of their daily sales experiences.

The Formula Line

THE Formula line itself coincides with the basic aim and purpose. No new item is added without proving itself by test. To meet unusual cleaning requirements, Formula bottles and packs over one hundred different items under its own label with the title "Formula Number 4 - 64 - 92" — on up to "Formula 500." These privately labelled items run from small bottles, packages, and cans to fifty-five gallon drums. Every Formula sales effort, whether it be a salesman's station wagon or a drum is identified with the smartly designed "broomman" who is as well known in the sanitation field as the "Old Dutch" woman.

In discussing the selection and training of salesmen, Bill Fried, sales manager, says none of his salesmen has been in the sanitary supply industry before. Rather than advertise for salesmen, which involves screening out such prospects as milkmen and bread truck drives, who refer to themselves as salesmen, Mr. Fried finds it more satisfactory to have his own salesmen recommend new men for the organization. This has worked out very well at Formula.

The company has a regular training program for salesmen, and in five years from now Formula will know how good it is, according to Mr. Fried. However, he has plans for a great deal more training for future salesmen. The new headquarters can provide adequate space for such a program, Mr.

(*Turn to Page* 169)

Self-Selection of Soaps . . .

Key to success of soap selling at J. N. Adam department store

By Ethelyn Weller

THE selling of toilet soaps has been left primarily to grocery and drug stores and, more recently to the super-markets. Today, however, buyers in department stores are becoming more interested in soaps for their cosmetics and toiletries departments. In some stores special sections or counters sell only soaps. Buyers know that to make such operations profitable a great deal of promotional work will be required. This will consist not only in placing soaps in these departments, but also in acquainting the customers with the fact that all leading brands of toilet soaps are available there. Every effort must be made to persuade patrons to buy these soaps and this must be done in a most subtle and appealing way. One very large department store which has done something about all this, with quite satisfactory results, is J. N. Adam & Company in Buffalo, N. Y.

Herbert W. Conner, who has been with this store for many years, and the cosmetics and toiletries buyer for the last ten, says that the selling of soap in his department became a challenge and he determined to stock this merchandise and begin a program which would make toilet soaps a more profitable item in the department. An advertising agency became interested in his project and together they have promoted soaps to a point where J. N. Adam & Co. customers do buy considerable amounts of this merchandise in the store.

"Actually, we have just begun," Mr. Conner explained. "We have had to work by the trial and error method but now, at the end of 19 months of experimentation, we can see where we are going and we definitely know many things that we did not know before about the merchandising of soap. We'll be making more tests of location, space allowances for separate lines, display arrangements and so forth for some time yet, but we do feel that soap can be made to be a reasonably profitable part of our inventory."

One of the very important points that Mr. Conner has learned is that there must be a wide variety of merchandise in the department to make soaps attractive. This includes price, quality and types. Profits are very small on unit sales but with a full stock, containing all possible "name" brands of toilet soaps, total sales over a period of time can be worthwhile. Soap sales in this department are now helping to equalize departmental profits.

It was suggested that a self-selection department be set up to act as a sort of guinea pig for the sale of various toiletries, one of which was soap. It was felt that much valuable information could be obtained in this way as to what customers would demand and buy in these lines if soaps were offered in

much the same way as the supermarkets handle such items. The psychological fact that the average American housewife likes to browse when she shops would be given full play.

Tests soon showed the best selector location to be at the end of the regular cosmetics and toiletries department on the main floor. At first this was only a section a few feet long on a wall where several shelves had been erected. Merchandise was arranged according to type, with prices marked plainly, and the customers were allowed to serve themselves. Clerks were on hand near the cash register at the end of the section to assist in any way and to wrap packages, accept payment or arrange for charge accounts. When not busy they worked in adjoining departments.

The small section was immediately popular and it soon outgrew its few feet. Accordingly a large gondola was added in the adjoining aisle. Soon a second gondola, also having several shelves, was put into service. This department now has 850 feet of shelf space. It is in an important area of the main floor and is always busy.

Displays Promote Sales

PROMOTIONS of one kind or another are continually in progress in the department. Sometimes they may take the form of attractive, colorful displays on the short end shelves of the gondolas. The color may be derived from the soap wrappers, from colorful jar tops, unusual containers, or in other ways. At times there are big baskets of bulk soap in several colors. Whatever the display it is visible from several aisles away and throughout the cosmetics department. Its main purpose is to lure patrons into the section. Once there, the merchandise usually makes its own appeal. These end displays are never static but are changed constantly as they are one of the strongest means of bringing customers to the department.

Special promotions include one-cent sales of individual lines of soaps or those in which certain soaps were tied in with the sale of bath salts, deodorants, etc. Occasionally tie-in promotions feature shampoos and allied products, or men's toiletries with special emphasis on shave soaps. Combination packages which feature soap and another item or two are always good sellers.

When bulk soaps are sold in large baskets they are always of good quality, selling for about 25 cents a cake if sold individually, but when sold in lots of six or eight they may be purchased at a reduced price. Soaps used for these sales are made by Wrisley or bear some other equally well-known brand.

Soap Bargain Squares

IN addition to selling these soaps in the self-selection department, they are also offered occasionally on large bargain squares in other places on the main floor. The usual procedure for these sales is to build up all four sides of the bargain squares with soaps having different colors, shapes and odors, piled two to three feet high. Large signs and posters advertise the sale merchandise. At least two girls are on hand within the square to serve customers quickly and efficiently. These sales have become very popular and many housewives now count on them to replenish supplies of soap for the family.

These bargain squares are always placed in a good traffic aisle and the sale lasts a week. Average sales of soap for this period are from 500 to 600 gross. Before the self-selection department was set up, the cosmetics department sold about $35 worth of soap each month; by simply displaying the soaps attractively sales leaped to five and six times that amount. With organized promotions now going on soap sales are climbing steadily.

Soap products are arranged in the department according to type, with bar and boxed soaps in one section, shampoos in another, men's shaving soaps in another and the various items that are sold with soaps such as bath oil, water softener, bubble bath and similar items in still another section. Mr. Conner stressed the importance of the sale of this last merchandise as companion items for toilet soaps. Each augments and supplements the sale of the other. Even such small items as booklets containing soap leaves, for carrying in a handbag or pocket while travelling, occupy a small space on one of the bar soap shelves. Farther along on the same shelf is another travel suggestion — envelopes containing a mild soap powder for use in laundering stockings or lingerie while travelling. Only a few of each of these items are carried as they are specialized merchandise, but they do help to round out the soap picture and fill an occasional need of a customer. They fit into the policy of having a wide and complete line of soap products.

Bar and boxed soaps, which include all the nationally known brands such as "Palmolive," "Camay," "Woodbury," "Lux," "Dial" and many others, occupy 28 feet of shelf space with about nine feet on each of three shelves, one above the other. Shampoos, which are the fastest selling of all soap items in the department, occupy 30 feet, on three shelves, with an additional six feet for color shampoos. Men's soap products fill eleven feet on the shelves, and the accessory items, 15 feet. About six times more shampoo than bar soaps are sold by J. N. Adam & Co.

Soaps for men sold by J. N. Adam include shaving soaps in all forms — creams in tubes and in aerosol containers, as well as cakes in bowls or sticks. Aerosol shave creams have gained rapidly in favor and today over 50 percent of all men's shave products sold at J. N. Adam are of the aerosol variety.

Experience has shown Mr. Conner and his associates that the top shelves on the gondolas are a particularly good location for displaying merchandise. Accordingly, different types of soap are displayed from time to time on a top shelf.

Soaps are given this perferential treatment as often as possible with shampoos occupying a top shelf in their section at all times. With the shampoos are such allied items as hair rinses, creams, color accessories and so forth. Color shampoos are not actively promoted but all leading brands are available and sell well. Clerks understand them well enough to give constructive advice regarding their use if so requested.

Hard Water Soaps Sell

HARD water soaps are in good demand at J. N. Adam. Buffalo area water is notably hard and these special soaps which lather profusely in hard water are much appreciated. Many customers who do not care for these soaps buy large quantities of the perfumed water softeners for use with regular bar toilet soaps. Such tie-in sales are actively promoted with these soaps.

When the department opened with the small wall section there were only about 400 items in stock. Today in the larger department, there are over 2,000. Broken down, in soaps alone, these include: 80 separate items in shampoos; 33 in color shampoos; 47 items in bar and boxed soaps; 69 in men's soaps, and 33 in allied accessories. This includes the items in various size packages, brands, colors, fragrances and other factors which make many items available in several forms. For instance, Colgate offers shaving soap in different size tubes, in a bowl and in aerosol containers of more than one size. Each constitutes one item. Each shade in a color shampoo is a separate item, and so on.

Sales of shampoos represent five percent of the department's volume and occupy 3½ percent of the shelf space; color shampoos sell one percent and occupy .65 percent of shelf space; bar and boxed soaps sell 1½ percent and occupy three percent of the space; men's soap products sell one percent and occupy 1.4 percent of shelf space, and allied accessories sales represent two percent and occupy two percent of the shelf space in the soap department.

A rigid stock control is maintained for this merchandise, with a complete inventory of every item in the department taken once a month. This is done by Mr. Conner, his assistant and two or three representatives from the advertising agency. A careful record is made of all merchandise in stock and in the warehouse, and a perpetual inventory is kept of stock as it is sold each day.

Orders are sent in to manufacturers every other week, made up from the daily sales records. Wanted items are listed daily on blank sheets of paper and copied on the order blanks at the end of each fortnight. Orders placed for most types of soaps now exceed those of the days before the self-selection department by at least six times.

Contrary to the practice in many department stores, the so-called "luxury" soaps of nationally known treatment lines of cosmetics, such as "Elizabeth Arden," "Coty," "Tussy," "Helena Rubinstein" and others equally well-known, are also included among the bar soaps. They are on the shelf unwrapped, grouped by lines, and sold singly if the customer so requests.

The offering of these soaps in the self-selection department has had two advantages. It has sold these soaps in the department, of course, but it has also acquainted many women with these products and so boosted sales of them in the regular cosmetics department. Most of these soaps, however, are purchased as gift items and will be gift wrapped upon request. The price of these soaps in most cases is too high to make them popular as family soaps. Many of them retail for $3.50 for three cakes.

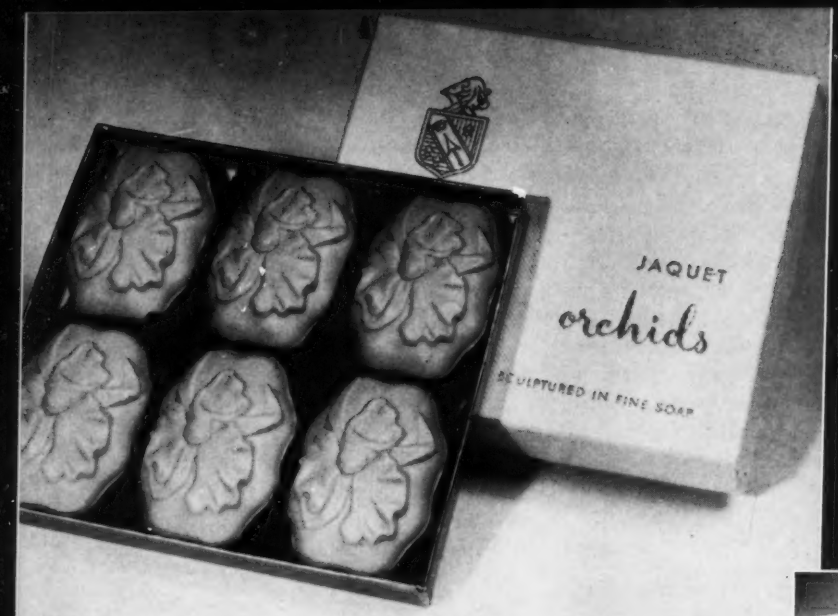
As gifts these products may be sold singly, in boxes of three, or in combination packages with toilet water, body powder or similar items. This angle of merchandising these luxury soaps is very actively promoted as Christmas gifts. In fact, from Thanksgiving until Christmas gift soap sales are of major importance. Soaps are displayed in many combinations and, wherever possible, this merchandise is coordinated with that of other departments and so displayed.

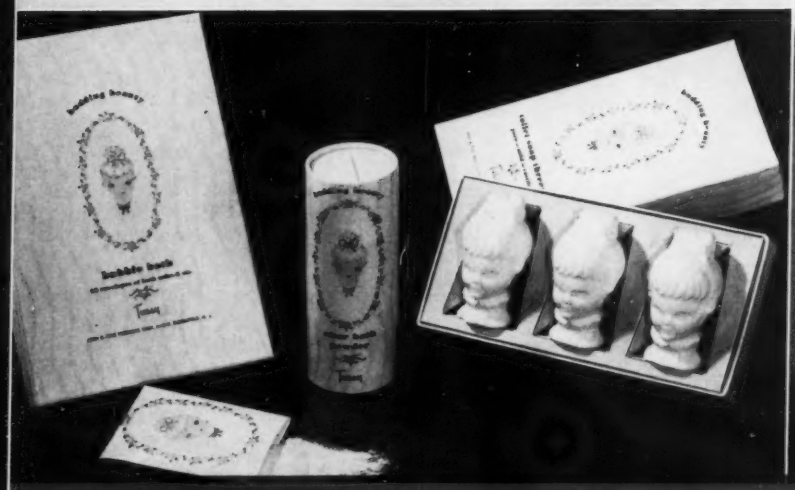
Stocks of these soaps are closely watched for Christmas business. Mr. Conner says that he knows now that he can order about four times the normal amount of these items for the Christmas trade. If a line sells a dozen bars a month during regular months he can safely stock four dozen bars for Christmas. This schedule is planned to leave the normal one dozen bars on hand for the first month's business after Christmas and it requires a careful inventory and a thorough knowledge of the department to be able to do this.

Little Advertising

OTHER than these seasonal and departmental promotions little advertising of soap products is done. There is an occasional small newspaper advertisement; when a cosmetics or perfume promotion is going on in the store soaps may be used as coordinated items and appear in department and window displays. Generally it has been found that good displays of soaps in the department bring in a satisfactory number of good customers. The fact that the self-selection section is on a busy traffic lane, adjacent to all cosmetics and in the heart of an area of the main floor devoted to women's accessories such as gloves, hosiery and lingerie is the most important factor in promoting this type of merchandise.

Store management has become very much interested in the work being done in the self-selection department and is satisfied with its growing success. Mr. Conner and his advertising friends are also well pleased, but they stress that there is much more yet to be done. J. N. Adam & Co. has at least proved that toilet soaps can be profitably sold in a department store.





What's New?

Top left: French soap orchids of Jacquet, Inc., Chicago, are being featured as Christmas gift items. Box of six tropic scented soap flowers retails for $1.50.

Top right: "Budding Beauty" after bath powder mitt (left) and jumbo bath soap (right) were introduced recently by Tussy Cosmetiques, New York, as part of its children's line of Christmas gift ideas. Castile-base bath soap, embossed with little girl's head, features pale blue cord to slip around neck when bathing. Soap retails for $1.00; the powder mitt is $1.25 in the two ounce size.

Bottom left: Another set of Tussy offerings in the "Budding Beauty" line of children's items are bubble bath (left); after bath powder (center) and toilet soap threesome (right). Sixteen envelopes of the bubble bath retail for $1.00. A three ounce package of after bath powder retails for 75 cents. Three cakes of castile-base soap, molded in a replica of "Budding Beauty's" head, retail for $1.00.

Bottom right: Silicone treated polishing cloths for general household use and for guns and tools were announced recently by Silicote Corp., Oshkosh, Wis. The household cloth is claimed to polish as it dusts. Protection against fingerprints, salt air, salt water corrosion and rust is claimed for the gun and tool silicone impregnated cloth.

Top left: New "E-Z Suds" liquid detergent of East Coast Soap Co., Brooklyn, for restaurant, institutional and other uses. The new detergent is to be sold exclusively through jobbers. A feature of the gallon can is a "Suds Control" plastic dispenser. By pressing down on the plastic top a given amount of the liquid detergent is dispensed. The device is claimed to cut waste.

Top center: The "new look" in 30 and 55 gallon drums of floor care products of S. C. Johnson & Son, Inc., Racine, Wis., features an over-all lemon yellow imprinted with black. The color combination resembles the familiar package line of Johnson's household products. An artist's conception silhouette of Johnson's administration and research center decorates the base of the drum. A printed notice cautions that purchasers should not accept drums if the seals are broken. New drums are available after Sept. 15.

Top right: Colgate-Palmolive Co., Jersey City, N. J., has joined the swing to sudsless type detergents with the latest addition to its line, "Ad". Promotion features use of the product in automatic clothes washing machines. Package is over-all red with reverse white lettering and blue shadows.

Bottom left: Another recent entry in the sudsless detergent derby is Sage Laboratories, New York. The new "Sage" controlled sudsing detergent is a non-ionic and is believed to be the first sudless product that is colored. "Sage" is blue. The standard size container retails for 33 cents.

Bottom center: "Amazon," believed to be the first germicidal floor wax, was announced recently by Trio Chemical Works, Inc., Brooklyn. The introduction of the new floor wax through retail department and hardware stores, marks Trio's first entry into the household chemical specialties field with a product under its own label. Eastern Can Co. supplied the pint, quart and one-gallon size cans in which the wax is packaged. Label color scheme is new metallic maroon and white.

Bottom right: Sage Laboratories', New York, new "Sage Dry Bleach" is powdered chlorine type product. It is a companion item to the firm's "Safety Bleach." The new dry bleach comes packed in carton with asphalt liner. Retails for 33 cents. Both bleach and controlled suds package feature premium offer on back label panel, with photograph of Jinx Falkenberg, who advertises product on radio-TV.

You CAN Add an AEROSOL Line . . . and without spending a dime for plant or equipment

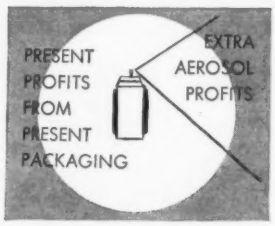
Now is the time to evaluate your product for "push-button" dispensing. Aerosols are booming. New applications for appealing, self-spraying packages are being discovered every day. If you are presently marketing your product in liquid form, the chances are you can also package it as spray or foam. Your product deserves analysis now, so we suggest you arrange with us for a free, comprehensive laboratory report. On the physical side, Continental's complete production, laboratory, and warehousing facilities eliminate any capital expenditure on your part. We do not merchandise packaged items of our own. Our sole operation is filling containers with your products . . . liquid, pressurized, or aerosol. Write today.

PRODUCTION. Continental operates 2 modern plants. Facilities will handle oil and water-base products, and refrigeration, pressure or liquid filling in any quantity. You expand sales . . . but invest nothing.

LABORATORY. Product, container, and valve research plus a tight system of quality control assure perfect product performance. We meet I. C. C. specifications and other regulations for your protection.

HERE'S HOW TO ENTER THE BOOMING *Aerosol Market* . . . USING OUR INVESTMENT

WAREHOUSING. Ample bulk storage space enables us to keep a good supply of your ingredients available at all times. Drop shipping in bulk lots. Use our Midwest plants as central distributing points.



Aerosol packaging may mean a bigger market for you. Aerosols adapt to perfumes, deodorants, medicines, insecticides, household chemical specialties, etc. Get our report now!

CONTRACT AND CUSTOM FILLING

MAIN OFFICE • 123 NORTH HAZEL STREET, DANVILLE, ILLINOIS

CONTINENTAL FILLING CORPORATION

PLANTS • DANVILLE, ILLINOIS — HOBART, INDIANA

GAIR can help PROMOTE YOUR PRODUCT

with eye-appeal PRINTING

Attractively printed Gair shipping boxes double as sales promotion aids—giving prominent display to brand names while traveling through the channels of distribution. Prospects along the way—from factory to warehouse, to store, to home—see these sales messages.

Look around. You'll notice that products from paints to peanuts, from soaps to stoves carry colorful, well-printed identification on their shipping boxes.

What about yours?

Remember, this traveling display is economical. You own the "billboards". . . for just the cost of plates and printing you add a strong link to your promotional chain.

To learn how your shipping box can double as a sales promotion aid, check with the Gair plant nearest you. Learn, too, how Gair's assured supply source, engineering ability and delivery service help give you the best in corrugated or solid fibre shipping boxes.

Ask for our booklet on the sealing of boxes.

CAMBRIDGE, MASS. • CLEVELAND, OHIO • HOLYOKE, MASS. • LOS ANGELES, CAL. • MARTINSVILLE, VA.
NO. TONAWANDA, N. Y. • PHILADELPHIA, PA. • PORTLAND, CONN • RICHMOND, VA. • SYRACUSE, N. Y. • TETERBORO, N. J.

GAIR

SHIPPING CONTAINERS
FOLDING CARTONS
PAPERBOARD

ROBERT GAIR COMPANY, INC. • 155 EAST 44th STREET • NEW YORK 17

Balanced performance...

for liquid-cream shampoos...with Du Pont "DUPONOL"* WAQ detergent

"DUPONOL" WAQ surface-active agent is a perfectly "balanced" detergent for your formula. It contains every property you need—blended to give maximum performance in liquid-cream shampoos.

Check these properties of "DUPONOL" WAQ and see why it will give you a better product...

"DUPONOL" WAQ is a viscous white paste, designed for the very whitest liquid cream shampoos—plain or "pearlescent."

"DUPONOL" WAQ has excellent foaming characteristics.

"DUPONOL" WAQ gives you thorough cleansing action, yet it can easily be formulated for gentle, non-drying performance.

"DUPONOL" WAQ is stable to light, heat, and ageing, giving you a product that stays attractive . . . stays effective.

"DUPONOL" WAQ has no strong short-chain alcohol odor to interfere with your perfume formula.

Du Pont has prepared dozens of formulations based on "DUPONOL" WAQ. For your copy of "'DUPONOL' WAQ SHAMPOO FORMULATIONS," write E. I. du Pont de Nemours & Co. (Inc.), Dyes and Chemicals Division, Wilmington 98, Delaware.

*Trade-Mark for Du Pont's Surface-Active Agents

Du Pont **DUPONOL WAQ** detergent

REG. U.S. PAT. OFF.

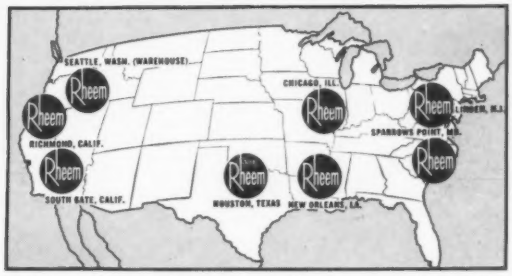
DU PONT

REG. U.S. PAT. OFF.

BETTER THINGS FOR BETTER LIVING . . . *THROUGH CHEMISTRY*

GET BOTH STEEL AND FIBRE DRUMS QUICKLY-FROM ONE SOURCE-RHEEM

RHEEM STEEL CONTAINERS ARE MADE IN SEVEN STRATEGIC LOCATIONS



Rheem Fibre Drums are being manufactured in four of these plants. Production lines are scheduled for installation in other plants soon.

"FAMILY IDENTIFICATION"

Rheem can furnish on Fibre drums the same type of decorative service it provides users of Rheemcote lithographed steel drums. Any design or trade-mark can be reproduced on an all-over label for Fibre drums in any number of colors to provide "family" identification for your products.

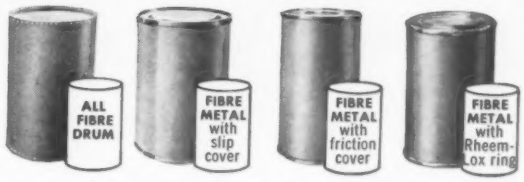
55-gal. Rheemcote Steel Drum

30-gal. Rheem Fibre-Metal Drum

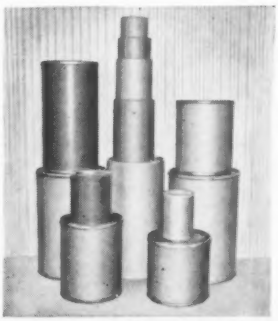
RHEEM ANNOUNCES A COMPLETE LINE OF FIBRE DRUMS TO SUPPLEMENT ITS STEEL SHIPPING AND EQUIPMENT CONTAINER LINES

To supplement its line of steel shipping and c[illegible] rom equipment containers, Rheem has added a complete line of Fibre and Fibre-Metal drums. These strong, lightweight, inexpensive drums come in four types and in a wide range of sizes.

Choose the Drum that Fits Your Needs



Choose the type that best fits your needs—All-Fibre drums, or Fibre-Metal drums with either slip or friction covers or with the new, easy to install and remove Rheem-Lox ring. Only Rheem offers all these types of low-cost containers.



Choose the Size that Fits Your Needs

Choose the size that best fits your needs. Fibre drums from 1 to 32 gallons in capacity; Fibre-Metal drums from 5 to 60 gallons. There is virtually a size for every possible requirement.

MAIL COUPON IN NOW! *for complete information*

RHEEM MANUFACTURING COMPANY
(Mail to Nearest Sales Office, Listed at Left)

☐ We would like to have your packaging engineers come to our plant and study our shipping container problems.

☐ Please send additional information.

NAME OF COMPANY_____

STREET_____

CITY_____ ZONE____ STATE_____

BY_____ SCS-9

RHEEM
MANUFACTURING COMPANY

Chicago 29, Illinois • New Orleans 20, Louisiana • Seattle, Washington
Houston 20, Texas • New York 22, New York • South Gate, California
Linden, New Jersey • Richmond 4, Calif. • Sparrows Point 19, Maryland
Export Sales, New York 22, New York

Foreign Affiliates and Associates:
Argentina - Buenos Aires • Australia - Adelaide, Brisbane, Fremantle, Melbourne and Sydney • Brazil - Rio de Janeiro • Canada - Hamilton • Italy - Milan • Peru - Lima • Philippine Islands - Manila • Singapore • Spain - Madrid • United Kingdom - Bristol

NOW, MORE THAN EVER BEFORE, YOU CAN RELY ON RHEEM FOR ALL YOUR SHIPPING CONTAINER REQUIREMENTS

The scent of soap
can be an impelling spur to sales

Tell your story well through the selection of the proper perfume. For suggestions and recommendations, ask the advice of the van Ameringen-Haebler soap perfumers who are unmatched in skill and experience in this field of scent.

VAN AMERINGEN-HAEBLER, INC. 521 WEST 57th STREET, NEW YORK 19, N. Y.

Seeing is Believing

Now – See for yourself how much more sales appeal

new liquid *Nacconol SL*

can give your liquid detergents.

Test-sample will clearly show you all these sales-making NACCONOL SL features—

pleasant characteristic odor — very low haze-point
no precipitation at temperatures down to freezing
good money value — no stabilizer needed
excellent foaming — emulsifies grease and oil
compatible with anionic and non-ionic materials

plus this big economy feature

needs no dissolving — cuts production cost

For a better liquid detergent always start with a liquid base. If your line includes — or you contemplate adding — a liquid detergent, phone, write or use this handy coupon to get a liberal sample of Nacconol SL. You'll be glad you did.

NATIONAL ANILINE DIVISION

ALLIED CHEMICAL & DYE CORPORATION

40 RECTOR STREET, NEW YORK 6, N. Y. • HAnover 2-7300

Boston 14, Mass., 150 Causeway St.	CApitol 7-0480	Richmond 19, Va., 8 North Fifth St.	Richmond 7-1530
Providence 3, R.I., 10 Westminster St.	DExter 1-3080	Columbus, Ga., Columbus Interstate Bldg.	Columbus 3-1029
Philadelphia 6, Pa., 200-204 S. Front St.	LOmbard 3-6382	Greensboro, N.C., Jefferson Standard Bldg.	GReensboro 2-2510
San Francisco 9, Cal., 517 Howard St.	SUtter 1-7507	Chattanooga 2, Tenn., James Building	Chattanooga 6-6347
Portland 8, Ore., 730 West Burnside St.	Beacon 1953	Atlanta, Ga., 1216 Spring St., N. W.	Elgin 0300
Chicago 54, Ill., The Merchandise Mart	SUperior 7-3387	New Orleans 12, La., Carondelet Building	Raymond 7228
Charlotte 1, N.C., 201-203 West First St.	Charlotte 3-9221	Toronto 2, Canada, 137-143 Wellington St. W.	Empire 4-6485

Allied Chemical

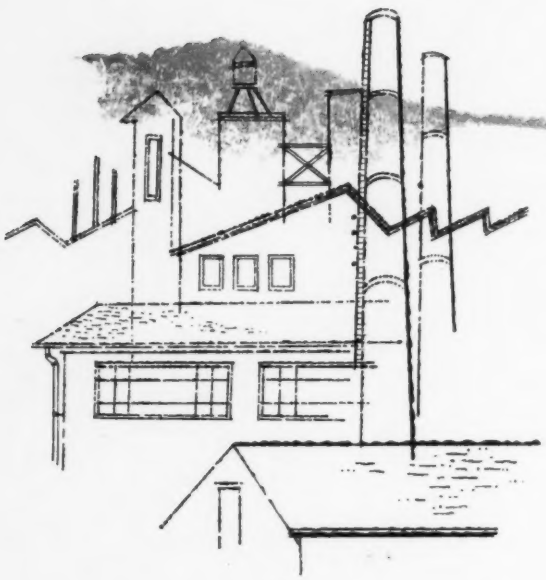
Please send sample of Nacconol SL

NAME_____

COMPANY_____

ADDRESS_____

USE SOAP IN YOUR PRODUCTS?



THEN INVESTIGATE NEW, IMPROVED IVORY BEADS AND AMBER GRANULES

If you're now using flaked or powdered soaps in your converting operations, you'll be interested in two new products recently developed by our research laboratories.

Ivory Beads and Amber Granules have all the performance advantages of Ivory Chips and Amber Flakes, with plus values in terms both of better physical appearance and mixing characteristics. Check them:

IVORY BEADS

A white, free-flowing, spray-dried soap of unexcelled purity and mildness. An excellent detergent and sudsing agent—the whitest, brightest, highest quality soap for industrial and converter use on the market today.

Because of its granular form, and small, uniform particle size, Ivory Beads goes into solution exceptionally fast, assuring better performance in the finished product. Stock solutions are easier to prepare . . . there's less tendency to ball or matt than in the case of powdered soaps.

AMBER GRANULES

A blown, 88% active, 42° titer soap. Because of its granular form, Amber Granules has many of the same desirable characteristics as Ivory Beads—rapid solubility, attractive appearance, ease of blending.

Recommended for the preparation of gel type products such as paste soaps and silver polishes because of its excellent gelling properties. Also for compounding powdered hand soaps, burnishing compounds, laundry detergents, floor cleaners, etc.

RECOMMENDED USES

Because of their granular structure, both Ivory Beads and Amber Granules blend readily and intimately with other converting materials. You can expect unusually efficient performance and safety from them in compounding a wide variety of industrial cleaners where the cleaning element comes in contact with the skin.

Ivory Beads availale in 50-lb. multi-wall paper bags. Amber Granules available in 75-lb. multi-wall paper bags.

For further information about these new products drop a postcard to

PROCTER & GAMBLE

Bulk Soap Sales Department, P. O. Box 599, Cincinnati 1, Ohio

America's largest manufacturers of soaps and synthetic detergents.

News

Reavey Joins Breck

Richard P. Reavey was recently appointed research chemist at the research and development laboratory of John H. Breck, Inc., Springfield, Mass. Previously he had been a research chemist in the research and development laboratories of E. I. du Pont de Nemours & Co., at the Chambers Works in Wilmington, Del.

Richard P. Reavey

A graduate of St. Michaels College, Winooski Park, Vt., Mr. Reavel received a fellowship in chemistry at Middlebury College graduate school, where in 1949 he received an M.S. degree in organic chemistry.

—★—

Mt. Hood Soap Co. Buys

The purchase of a two-story brick building at the northwest corner of N.W. 3rd Ave. and Flanders St., Portland, Ore., was announced recently by Henry Feldman, president of Mt. Hood Soap Co., Portland. The structure, which is on a plot 72 x 96 feet, will be extensively remodeled to house the soap chip and soap flake processing operations of the 52 year old soap company. The firm now occupies most of the square block bounded by N.W. 3rd and Fourth Avenues, and Glisan and Flanders Streets. Purchase price of the building was said to be approximately $27,000.

Mount Hood Soap Co. has 35 employees and markets its soap products throughout the Northwest. In addition it does a large export business in Central and South Americas.

—★—

N. Coast Chemical Fire

Two main buildings of North Coast Chemical & Soap Works, Seattle, Wash., were destroyed in a $160,000 fire Aug. 7. Two, two-story 50 x 100 foot buildings, in which chemicals were reported stored, were reduced to skeletons in less than one hour. A misplaced cigaret was blamed for the fire, which was discovered at nine o'clock in the evening. No one was injured in the blaze. The plant employs about 100 persons and manufactures soap for industrial use.

—★—

Join American Alcolac

Morris J. Warren and Ralph A. Pentz, Jr., have been named to the sales and technical departments of American Alcolac Corp., Baltimore, according to a recent announcement by John Andre, executive vice-president.

Mr. Warren, who is doing sales and application research for the firm, was formerly with the U.S. Department of Agriculture as a laboratory technician. He also served as a research laboratory technician with the U.S. Army Chemical Corps. He is a graduate of the University of Maryland, where he received his B.S. degree.

Mr. Pentz also holds a B.S. degree from the University of Maryland. He is to be connected with American Alcolac's technical and customer service department. For three years prior to joining American Alcolac, he was a laboratory technician for Davison Chemical Co., Baltimore.

Lewis Bon Ami Sales Head

Stanley Lewis, formerly assistant sales manager, was recently advanced to the post of general sales manager of Bon Ami Co., New York. Mr. Lewis has been with the company since 1950, when he joined Bon Ami after having been with Canada Dry Ginger Ale, Inc., New York, since 1941 as national merchandise manager. Mr. Lewis is a graduate of Harvard College, where he received a B.S. degree, and Harvard School of Business.

Stanley Lewis

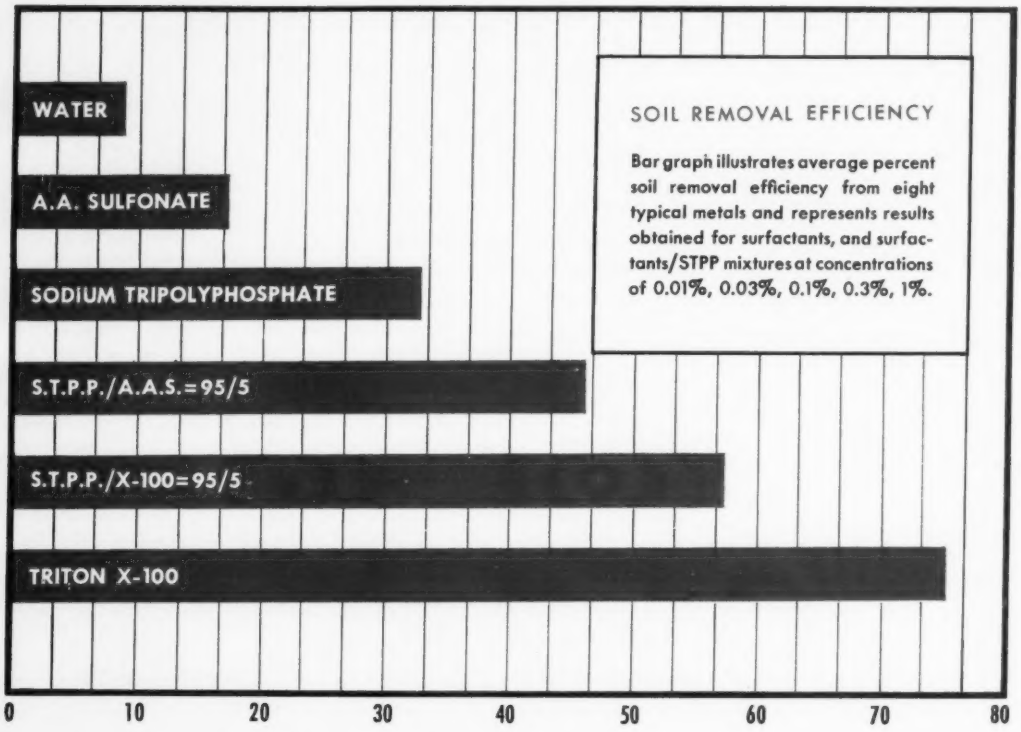
—★—

Homer Banta Dies

Homer Dwight Banta, 62, former president of Iowa Soap Co., Burlington, Ia., died Aug. 14. Mr. Banta joined the soap company in 1912 and became general manager in 1925. In 1930 he was named president succeeding John Blaul, first president of the company, which had been organized in 1918 to acquire the assets and business of a predecessor firm, Alexander Brothers. The latter firm was organized in Burlington, Ia., in 1891.

When Iowa Soap Co. was acquired by Ames, Emerich & Co., Sills, Fairman & Harris, Inc. and Yantis & Co., Chicago investment firms, in April, 1951, John F. Hodson, vice-president and plant superintendent, became president and

ALUMINUM, ZINC, IRON, STEEL, BRASS, COPPER AND SILVER...
TRITON X-100 CLEANS THEM ALL



Newest data obtained by the Rohm & Haas Dynamic Detergency Test confirm that the cleaning efficiency of a typical low cost cleaner is improved appreciably by TRITON X-100. The bar graph shows that on eight different metallic surfaces the effectiveness of sodium tripolyphosphate is increased 73% by the addition of 5% of TRITON X-100. However, an equivalent amount of an alkyl aryl sulfonate added to sodium tripolyphosphate increases cleaning efficiency by only 39%. Without alkaline builders TRITON X-100 is over eight times better than water; under the same conditions the alkyl aryl sulfonate is only twice as effective a cleaner as water. Complete figures on these results—showing relative effectiveness of detergents in soil removal and prevention of soil redeposition on hard surfaces—will be sent upon your request.

Clip this information for your reference files. If you would like technical assistance on the uses of TRITON surfactants write us.

TRITON is a trademark, Reg. U. S. Pat. Off. and in principal foreign countries.

CHEMICALS FOR INDUSTRY

ROHM & HAAS COMPANY

WASHINGTON SQUARE, PHILADELPHIA 5, PA.

Representatives in principal foreign countries

general manager. Mr. Banta was named chairman of the board at that time. He remained with Iowa until the company was reorganized in 1953, when it was merged with Misco Precision Casting Co., a subsidiary of Michigan Steel Casting Co., manufacturer of castings for jet planes.

Mr. Banta was active in the affairs of the Association of American Soap & Glycerine Producers and in 1944, '45 and '46 served as a director of that organization. He is survived by his widow.

— ★ —

Lawrence Joins Wyandotte

Appointment of Richard M. Lawrence as director of business research for Wyandotte Chemicals Corp., Wyandotte, Mich., was announced recently by William F. Waldeck, director of research and development. Mr. Lawrence had been senior market analyst in the general development department of Monsanto Chemical Co. since 1947. Prior to that he was chemical market analyst for Atlas Powder Co., Wilmington, Del., and earlier was a chemical expert for the U. S. Tariff Commission.

— ★ —

Polak's Frutal Works 40

Polak's Frutal Works, Inc., Middletown, N.Y., producers of essential oils, perfumes and flavoring raw materials, celebrated its 40th anniversary on Aug. 21. Ceremonies commemorating the event were held in Amersfoort, Holland, where the company was founded by Jac. Polak and his brother, the late Henri Polak. Jac. Polak, chairman of the board, attended the celebration and was presented with a commemorative plaque by personnel of the company. Frits J. Polak, who recently succeeded his father as president of the American company, was also present. From humble origin in a small building in Amersfoort, Holland, the firm has grown into a world-wide organization with its main headquarters now established in Middletown, N.Y. Associated companies operate in Holland, England, Belgium, France and Germany.

In Lever Industrial Post

Alfred A. Michaud has been appointed sales manager of industrial detergents for Lever Brothers

Alfred A. Michaud

Co., New York, it was announced recently by W. H. Cochrane, general manager of the company's industrial division. Mr. Michaud was formerly central district sales manager for the industrial detergents department in Chicago. He succeeds W. P. Black, who has been appointed to the sales staff of the company's Lever division.

Mr. Cochrane also announced the appointment of J. Kenneth Haher to replace Mr. Michaud as central district sales manager for the industrial detergents department. Mr. Haher joined Lever Brothers in 1953 as a salesman in the industrial detergents department. He is making his headquarters in Chicago.

— ★ —

Boston BIMS Golf Outing

The final outing of the season of the BIMS of Boston is to be held Wednesday, Sept. 15 at Nashua (N. H.) Country Club.

The largest golf outing of the year of the BIMS of Boston was held at Dedham (Mass.) Country and Polo Club on Aug. 19. Golf prizes at this outing were won by: Percy Pyne of American Cyanamid Co.; Henry Dillion, Rustmaster Chemical Co.; John I. Vandewater, R. W. Greeff & Co.; C. F. Karkalits, Hoffman-LaRoche, Inc., George Blake, Givaudan Delawanna, Inc.; C. P. Seaverns, Howe & French, Inc., and James P. Kelly of Pacquin, Inc.

Door prizes were won by: Irving Loxley, Heyden Chemical Corp.; John O'Day, Jr., Van Dyk & Co.; F. N. Langlois, Rexall Drug Co.; V. J. Wilbourn, J. T. Baker Chemical Co.; W. E. Kell, Ungerer & Co.; J. N. Conover, L. Sonneborn Sons, Inc., and Walter Sheehan, Dow Chemical Co.

A special prize, a portable radio, was won by R. Allyn Gowdy of Stanley Home Products, Inc., East Hampton, Mass.

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Colgate to Move to NYC

Colgate-Palmolive Co., Jersey City, N. J., will move its headquarters office staff to New York City, it was revealed last month. Lack of suitable office space is given as the reason for moving. Negotiations to rent several thousand square feet of floor space at 300 Park Ave. are reported under way at this writing. The building in which Colgate-Palmolive Co. is seeking space is a skyscraper now under construction, and is one block south of Lever House, headquarters of Lever Brothers Co., at 390 Park Ave.

Plant operations, which employ about 2,000 persons, will remain in Jersey City. Additional construction of factory space is now underway near the company's present offices on Hudson St. in Jersey City. The new warehouse is estimated to cost approximately $6,000,000, and is expected to be completed some time this year. In addition to the home office building on Hudson St., Colgate offices are located in other buildings, some on adjacent Exchange Place.

Colgate has had factories in Jersey City since 1837. When Colgate merged with Palmolive-Peet, in 1928, the headquarters offices were moved from Chicago to New York. Two years ago the company was offered Jersey City's Medical Center Clinic Building by the then Mayor John V. Kenney for a reported $10,000,000.

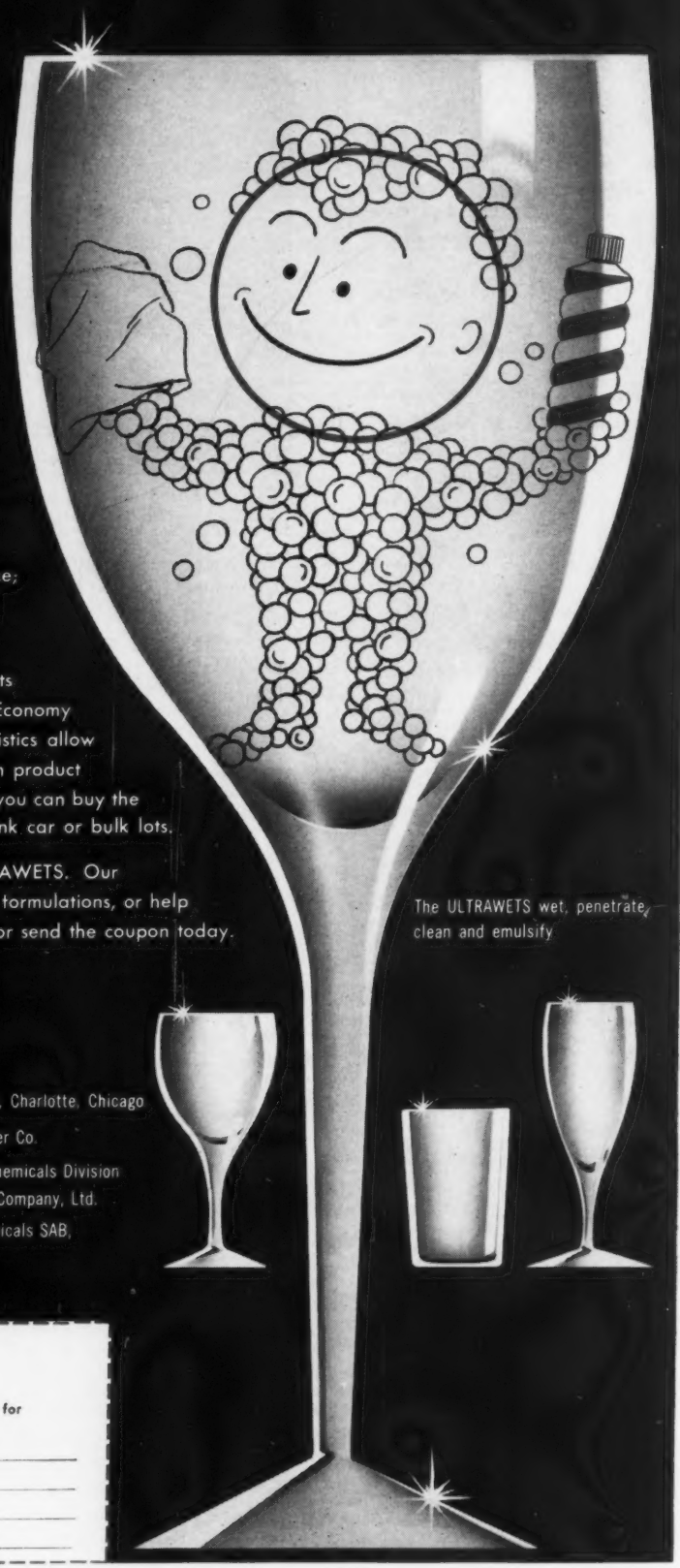
Suds, Shines and SELLS

The growing preference for liquid detergent formulations is showing up in the sales picture . . . last year there was a phenomenal 90% industry-wide increase in these sales.

And no wonder . . . liquid detergent formulations offer real economy; instant solubility in any water; a pleasing fragrance; sneeze-free washing; dishes that dry shining bright; no sink scum to scrub away.

Many of today's best-selling liquid detergents are formulated with Atlantic ULTRAWETS. Economy is one reason. High performance characteristics allow a saving on the quantity needed to maintain product efficiency. Add to this saving a further one: you can buy the ULTRAWETS at significantly low prices in tank car or bulk lots.

Ask us for detailed information on the ULTRAWETS. Our Chemical Products Sales Division can supply formulations, or help you develop your own. Write, wire, phone or send the coupon today.



The ULTRAWETS wet, penetrate, clean and emulsify

ATLANTIC
PETROLEUM CHEMICALS

Philadelphia, Providence, Charlotte, Chicago
In the West: L. H. Butcher Co.
In Canada: Naugatuck Chemicals Division of Dominion Rubber Company, Ltd.
In Europe: Atlantic Chemicals SAB, Antwerp, Belgium

THE ATLANTIC REFINING COMPANY
Dept. E-9, Chemical Products Sales
260 South Broad Street, Philadelphia 1, Pa.

Please send me information on the ULTRAWETS for liquid detergent formulations.

Name _____

Firm _____

Street _____

City _____ *Zone* _____ *State* _____

Jones Names Claus

The appointment of Carl A. Claus as manager of eastern sales for R. A. Jones & Co., Cincinnati

Carl A. Claus

soap press and cartoning machine manufacturers, was announced recently. Mr. Claus is making his headquarters at newly established offices at 382 Springfield Ave., Summit, N. J. The telephone number is Summit 6-0253. Aiding Mr. Claus are Allen Suydam and George Hussey, who have been with R. A. Jones for several years in sales and service work.

—★—

New Oakite Labs.

Official opening of the new and greatly expanded chemical research development, service and engineering laboratories of Oakite Products, Inc., New York, will take place Sept. 15. The new laboratories are located at 350 Hudson St., New York.

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Oil Chemists Hear Colt

E. W. Colt, technical director, soap division, Armour & Co., Chicago, spoke before the newly formed North Central Oil Chemists' Society at the group's third dinner meeting held recently at the Builders Club in Chicago. His subject was the current glycerine situation as related to fats and oils and chemical industries. He discussed various processes, specific uses, and the outlook for glycerine from natural sources. After the talk, Mr. Colt and J. B. Segur of Miner Laboratories, Chicago, answered numerous questions. A program for 1954-55 is being arranged and plans are in progress for affiliation as a local section with the American Oil Chemists' Society.

—★—

Polaks Visit Europe

Frits J. Polak, president of Polak's Frutal Works, Inc., Middletown, N. Y., left last month by air for a business trip to Europe. He was to return to the U. S. early this month after having conferred with various affiliates in Holland, England, France and Germany. Also returning at about the same time is Jac. Polak, chairman of the board, who has been in Europe since early in June.

Buys Wrisley Plant

Visking Corp., manufacturers of cellulose sausage casings, has purchased the land and buildings of the Allen B. Wrisley Co., at 6801 W. 65th St., Chicago, it was announced in July. The property was then immediately leased back to the Wrisley firm, which will continue manufacturing of its soaps and toilet products. Visking, however, reserved space for office and other facilities for its own use. Included in the deal were two new buildings used for offices and warehousing, and a group of buildings with 386,000 sq. ft., of space for manufacturing. All were valued at $1,900,000.

P&G Ups Werner, Gale

The appointment of William G. Werner to the newly created position of director of public and legal services was announced by Procter & Gamble Co., Cincinnati, recently. His responsibilities include the public relations department and the new legal services department. Mr. Werner joined Procter & Gamble in 1911 and has been manager of the division of public relations since he organized that division in 1941.

Oliver N. Gale has been named manager of the public relations department. He has been with P&G since 1937 and was appointed associate manager of public relations in 1949.

For the time being, Mr. Werner is acting as manager of legal services department, which embraces trade mark activities and certain other legal activities of the company. He is a past president of the Public Relations Society of America and the United States Trade Mark Association.

Mr. Werner was recently appointed by the United States Chamber of Commerce to its committee on business statistics. The committee, which will work for full restoration of regular censuses of manufactures, minerals and business and methods for making maximum use of this data, was to hold its first meeting Sept. 16, in Washington, D. C.

William G. Werner

Oliver N. Gale

Givaudan gives you experienced help in perfuming men's toiletries

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The market for men's toiletries is a live, growing market . . . rich with opportunities for smart promotion. And the key to this market is fragrance . . . fresh, original scents that rouse masculine interest and respect, and stimulate men's natural pride in better grooming.

Givaudan has developed many fragrances that meet the challenge of this market . . . and we are prepared to help you develop special new scents that heighten and broaden the appeal of your products. We are also prepared to give you experienced counsel in solving any perfuming problems that may arise in the use of aerosol mediums, polyethylene containers and other packaging materials.

GIVAUDAN

Better Perfume Materials Through Constant Research and Creative Ability

GIVAUDAN-DELAWANNA, INC.
330 West 42nd Street • New York 36, N. Y.

Branches: Philadelphia • Boston • Cincinnati • Detroit
Chicago • Seattle • Los Angeles • Toronto

Tidy House Ups Gaither

Edwin T. Gaither has been named director of sales for Tidy House Products Co., Shenandoah,

Edwin T. Gaither

Ia., makers of household cleaners, detergents, bleaches and starches, it was announced late last month.

Formerly executive assistant, Mr. Gaither will direct all Tidy House sales functions. Before joining Tidy House, Mr. Gaither was division manager in Camden, N. J., for Iowa Soap Co. Before that, he was vice-president and general manager of Haskins Brothers & Co., soap makers, Sioux City, Ia. and Omaha.

Tidy House manufactures "Perfex," "Glosstex," "Dexol," and "Shina Dish" and has plants in Omaha and Malta, O.

At the same time, Tidy House announced that the firm of Stevens Thurow, Chicago, has been retained to institute a sales training program.

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P&G Record Sales

Total sales of Procter & Gamble Co., Cincinnati, for the fiscal year ended June 30 reached an all-time high of $811,050,045, it was reported recently. For the latest fiscal year P & G had a net profit of $52,328,002, equal to $5.42 a common stock share. This represents an increase over the previous fiscal year when earnings were $42,031,863, or $4.35 a share. Taxes amounting to $62,403,646 were up, too, from the previous year.

The "intense pressure on the company" as a result of the entry of several new firms in the detergent business, as well as the "aggressiveness of the entire soap industry" was cited in the report.

— ★ —

Four Join D&O

The addition of four chemists to its technical staff was announced recently by Dodge & Olcott, Inc., New York. Two have joined the perfume laboratories and two have been added to the flavor department.

Fritz Schubert, formerly laboratory manager for Naugatuck Aromatics, and Ray P. Williams, a quality control technician for the perfuming materials plant of E. I. du Pont de Nemours & Co., Wilmington, Del., at New Brunswick, N. J., have been appointed to the technical staff of the D&O perfume laboratories. Mr. Schubert is an industry veteran of 30 years and began his career in Europe with Curt Georgie, Leipzig, essential oil house. Upon his arrival in the U. S. in 1926 he became laboratory manager of Renee Forster, later joining Naugatuck in a similar capacity.

Ray Williams was with du Pont in New Brunswick for eight years until that plant was discontined earlier this year.

William Ammon, formerly supervisor of quality control for the Stange Chicago plant, has joined the staff of the new D&O dry soluble seasoning department.

Joining the D&O flavor department laboratories in New York, is Jacob Glueck, who has been in the flavor industry for the past 14 years, most recently with Felton Chemical Co., Brooklyn.

F. Schubert

Ray Williams

Colgate Names Robitschek

F. O. Robitschek has been named manager of the soap sales merchandising department of Col-

F. O. Robitschek

gate-Palmolive Co., Jersey City, N. J., it was announced late last month. In addition to his new duties, he continues as merchandising brand manager for "Ajax Cleanser."

— ★ —

Soapers Up Coupon Fees

Increases in the fees paid to retailers for handling of coupons for soap and synthetic detergent products were announced in August by Procter & Gamble Co., Cincinnati; Colgate-Palmolive Co., Jersey City, N. J., and Lever Brothers Co., New York. The three companies in separate announcements stated they would increase the fee from one to two cents for each coupon the retailer handles.

Colgate announced that it is maintaining its present policy of reimbursing the grocer or chain store manager for postage or express charges incurred in mailing coupons to various Colgate branch accounting offices.

Procter & Gamble has agreed not to charge for postage or express costs for coupons shipped to their warehouse in Cincinnati. In addition, P&G announced it had installed equipment to count the coupons, for which checks are sent to retailers. A new punch card coupon system handles the sorting and counting.

a round of applause

for **Metso® Anhydrous**

Pure Anhydrous Sodium Metasilicate

You, too, will choose Metso Anhydrous for these important qualities —

high purity • Here is the "anhydrous" with a true metasilicate ratio. The percentage of soluble silica (SiO_2) is in correct ratio to alkali (Na_2O). Metso Anhydrous has *higher* SiO_2—low CO_2 content.

quality appearance • White, free-flowing granules are attractive. They blend readily with synthetic detergents, caustic soda, phosphates, carbonates and soap. Metso Anhydrous is carefully sized to minimize dusting.

reliable performance • Metso Anhydrous dissolves rapidly, important in many types of compounds. Because of a special manufacturing process* Metso Anhydrous' unique physical structure increases resistance to caking from atmospheric moisture. This improves product stability.

adaptability • Used successfully in compounds for laundries, metal finishing (electro-plating, soaker tank, spray washing), steam gun cleaning, ore dressing, machine dishwashing, dairies, packing houses, textiles, paper deinking, soap builders.

availability • Immediate deliveries can be made from our Works or from distributors' stocks.

• Attractively packed in multiwall paper bags or in 44 gal. asphalt barrier fibre drums. If you prefer, Metso Anhydrous is available in unlabeled packages.

Write or 'phone (MArket 7-7200) for sample, prices and literature.

*U.S. Pat. No. 2,239,880

METSO PQ **metso® detergents**
PQ® SOLUBLE SILICATES

PHILADELPHIA QUARTZ CO.
Originators of free-flowing Sodium Metasilicate
1152 Public Ledger Bldg.
Philadelphia 6, Pa.

NSSA New York Meeting Oct. 27-28

TENTATIVE program details for the fifth eastern regional conference of the National Sanitary Supply Association were announced early this month by Burton L. Feinson of American Dispenser Co., and eastern regional vice-president of the N.S.S.A.

The two-day meeting will be held Wednesday and Thursday, Oct. 27 and 28 at the Hotel Statler, New York. The morning and afternoon sessions and group luncheon will be held in the Georgian Room. The reception, banquet and floor show will be held the evening of the first day, Oct. 27, in the Keystone Room. The concluding day's sessions and luncheon will be held in the Penn Top.

Following welcoming addresses by a city official and officers of the National Sanitary Supply Association, including one by Philip Shore, Shore Metal Products Co., Los Angeles, national president of N.S.S.A., Leo Kelly, N.S.S.A. executive vice-president will speak on the association and the most effective ways of using it.

Don F. Coppell, vice-president in charge of engineering and training, Wagner Baking Co., Newark, N. J., will speak at the afternoon session, Oct. 27. Mr. Copell, who spoke at last year's two-day meeting, will discuss selling of sanitation. The selling of sanitary supplies will be discussed at this session by the sales manager of a large sanitary supply firm.

A panel discussion of "Cooperating for Profits Between Jobber and Manufacturer" will conclude the first day's sessions. Participating will be: H. Crandall, Crandall Supply Co., Binghamton, N. Y.; Alan H. Newmayer, Fidelity Cleaning Supply Co., Philadelphia; Paul N. Caplan, Merit Paper & Chemical Corp., Cambridge, Mass.; Murray E. Rudin, Iron City Wiping Materials Co., Pittsburgh; Carl Himmelfarb, Dixie Janitor Supply Co., Washington, D. C., and

Don F. Coppell

Jacob Kahn, Windsor Wax Co., Hoboken, N. J., moderator.

"Selling in Today's Market," the opening address of the second day of the meeting, Thursday, Oct. 28, will be covered by the sales manager of one of the large oil companies. Maintenance problems of the large organization and a talk on flooring will conclude the morning session, Oct. 28.

"Profitable Advertising for the Jobber" by Frank Reilly, editor of *Soap & Chemical Specialties*, will open the afternoon session Oct. 28. This talk will be followed by a discussion of "New Techniques for the Selection of Personnel" by King Whitney of Personnel Laboratory, New York. A preview of the annual meeting of the National Sanitary Supply Association in Atlantic City, N. J., March 20-23 will be given in a talk by Charles B. Solly of Harley Soap Co., Philadelphia.

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Goett in Atlas Post

Edward J. Goett was recently appointed director of the newly created commercial development department of Atlas Powder Co., Wilmington, Del., it was announced by Ralph K. Gottshall, president. Mr. Goett had been with Charles Pfizer Co., Brooklyn for the past 12 years.

Continental Oil Building Novel Research Laboratory

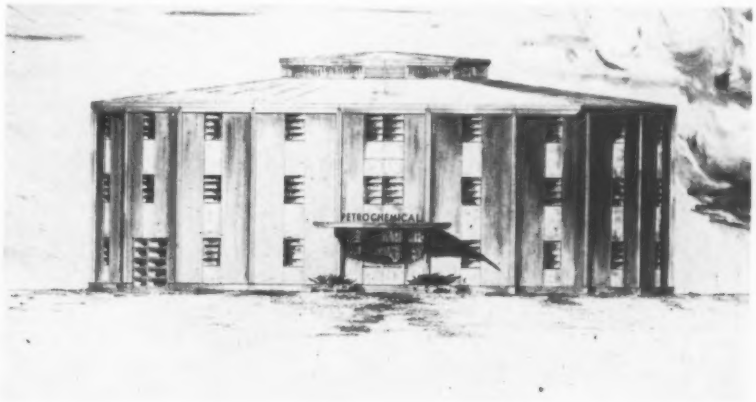
A unique research laboratory building being constructed from an 80,000 barrel oil storage tank and having a hole in the middle like a doughnut was announced late last month by Harold G. Osborn, vice-president of Continental Oil Co., Ponca City, Okla. To cost approximately $500,000, the unique research laboratory is expected to be completed in early 1955.

Continental Oil plans to bring about 60 additional scientists and research workers to its Ponca City research center to staff the new laboratory when it is completed.

The new building will be three stories high, with a wall like the hole in the doughnut, reaching upward through the center of the structure from ground level to roof. Offices and laboratories will be arranged around the ring of the doughnut. Suspended from the ceiling above the doughnut hole will be a travel hoist to handle pilot plant equipment and experimental apparatus.

Each of the three floors encircling the hole will contain offices, special laboratories and utility and conference rooms, facing the well area. The three floors will provide 33,000 square feet of floor space.

Air conditioned and fully insulated, the unique research building will have windows with gay awnings and a canopied entrance for employees and visitors. The exterior will be finished with aluminum paint.



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for new

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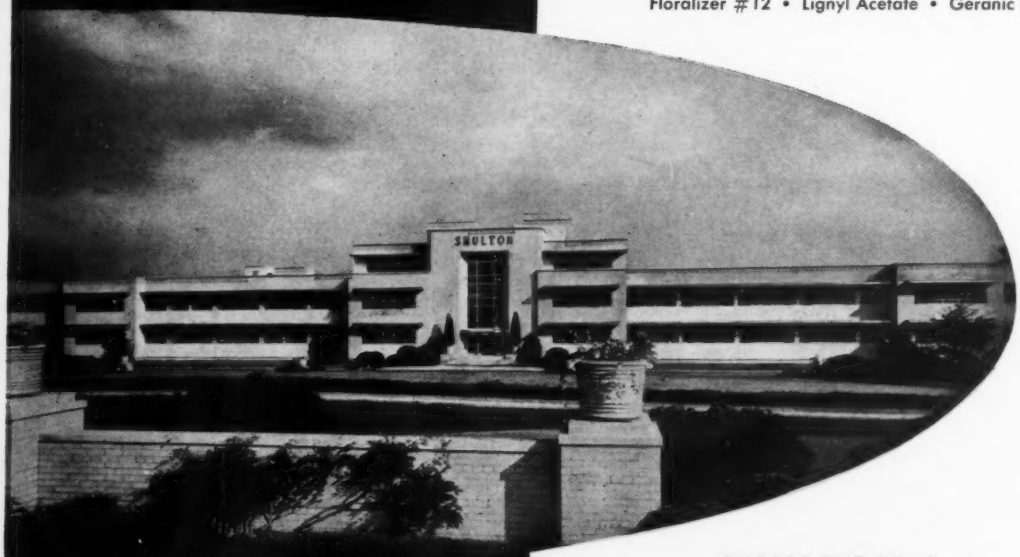
achievements

Rhodinol Shulton, for example . . .

- a true Rhodinol
- made by a new process
- with consistent odor and chemical character
- approximately half the cost to you of similar material ex Geranium Oil
- thus Shulton makes possible the use of a pure Rhodinol in innumerable formulas without prohibitive cost

Rhodinol Shulton is another successful product resulting from our extensive chemical research program. Among others now available are:

Vanitrope® brand of propenyl guaethol
Floralizer #12 • Lignyl Acetate • Geranic Ether



Samples and prices available on request

SHULTON, Inc.
FINE CHEMICALS DIVISION

Plant:
Route 46, Clifton, N.J.

Sales Office:
630 Fifth Avenue, New York 20, N.Y.

Novelty Soaps Chicago Toiletries Show Hit

THE 12th annual Beauty and Fragrance Show, sponsored by the Chicago Associated Toiletries Salesmen and held in the Palmer House, Chicago, Aug. 22 to 27, is reported to have resulted in an unusually large volume of new business for the more than 100 participating exhibitors.

Shown at the Chicago show for the first time were the hot dog and the 'burger on a bun, done in soap so realistically that visitors were warned they were "indigestible."

An Austrian soap maker, the 102-year-old Mem Co., Inc., thought them up. The firm also showed other food items in soap, among them a four-piece "Quick Snack" set complete with Swiss cheese, deviled egg, pickle and tomato.

H. Y. Ernstein, midwest sales manager for Marton Freres, Inc., New York, representatives of the Mem Co., said this was the first showing of Mem products at this Chicago show in seven years. Included in the display were eight novelty soaps from Bavaria, ranging from a "Venus" to "Cactus Garden," also a castile box imported from Italy.

The House For Men, Chicago, long famous for its "His" line of masculine toiletries, now has something for "her", too, Charles Cameron, sales manager, announced. This new feminine item, a "Hers" shower soap bar with cord, has a raised crest molded in the bar, to match its opposite number, long available for "him" alone. Among other new House For Men products was an 11 ounce "Quick Shave" soap in aerosol container and a lanolated after shave lotion.

Allan B. Wrisley Co., Chicago, introduced a new "See Through" carton with transparent acetate cover for their entire "Superbe" line of toilet soaps. Other new Wrisley items included bubble bath crystals packaged in an artistic reusable glass vase with hand decorations; a "Stack O' Soap" window carton with five cakes; a "Soapee" set of 12 guest size cakes, individually wrapped in assorted scents and colors; a new shower soap on a rope, first of its kind by Wrisley; a "Storyland" set with soap, bubble bath and cologne for the young "Miss"; also a bottled liquid bubble bath and individually wrapped bubble bath packets for the kids. Wrisley's "Town House" men's line has a new shaving lotion and cologne dresser set, while among other novelties was a "Bath Wand" dispensing bubble bath crystals. L. Norton Wrisley, sales manager, in charge.

Trylon Products, Inc., Chicago specialists in bubble bath tablets and granules, emphasized the Christmas motif on colorful packages for many products. First showing was made of a new "Queen" bubble bath oil in a full quart plastic squeeze bottle with measuring cup cap. Among other new items was a "Pursette" bubble bath for children, with 14 packets in a unique reusable "purse" container; a "Prize Package" with a toy on its top, at no extra cost; an "Aqua Vie" foam bath in single squeeze, plastic container; a "Party Pack" with packages of three tablets intended for party favors; and a full pint size decanter for gift use. O. A. Barke, sales manager, in charge.

Hewitt Soap Co., Dayton, O., reported heavy sales of their newest soap product, a gift chest with 17 bath, hand and guest size cakes, introduced earlier, also a new four-cake "Sachet" package with cellophane wrap, ribbon and card. Attention was directed to the availability of sleeves with Christmas designs for the cartons of Kensington, Omnibus and other toilet soaps. Tom Norris, veteran Hewitt salesman, was in charge, assisted by J. E. Reardon.

King's Men, Ltd., Los Angeles, Calif., showed their line of lotions, colognes, deodorants, both spray and solid, hair dressings and other men's toiletries. New items included a shaving stick, a shaving cream, brushless or lather, and a shaving bowl with Christmas appeal. Paul Klein, sales manager, in charge, assisted by Richard K. Jones, Chicago representative.

Shulton, Inc., New York, featured the assistance retailers will get from the extensive company advertising program for the fall months. This includes insertions in 25 national and class magazines, 94 Sunday newspaper magazine sections, and a newspaper campaign for "Old Spice" men's toiletries in 91 cities, also television spots in 34 cities and radio spots in 49. On display were toilet soaps of assorted scents, colors and composition for varied uses. W. Guindon, Chicago division sales manager, in charge.

Lightfoot Schultz & Co., New York, introduced four new items: a two-piece castile soap set, "Mary and Her Little Lamb;" a gift box with 12 "Tropical Almond" guest size cakes; four "American Beauty Roses" cakes, individually wrapped in gift box; and "Bucket O' Bubbles" in large waterproof container, sufficient for 100 bubble baths. Generously displayed were selections from Lightfoot's line of novelty designs from cowboy guns to pink elephants.

John H. Breck, Inc., Springfield, Mass., had a new hair shampoo in plastic squeeze bottle, available in six sizes, and also featured a liquid baby soap and a mother and baby soap set. R. G. Seyffert, Chicago district representative, in charge.

Alfred D. McKelvy Co., New York, was on hand with their "Seaforth" line of men's soaps, shampoos and lotions, with Edward Casson and Henry O. Dow to handle visitors.

— ★ —

Colgate Men Die

Henry A. Limbach, 43, an assistant sales manager of Colgate-Palmolive Co., Jersey City, N. J., died recently in Morristown (N. J.)

Mathieson Chlorine: *worth its salt*

Row upon row of mercury cells characterize the uniform high purity of Mathieson chlorine. These cells decompose a salt solution by electrolysis to form a sodium amalgam and wet chlorine gas. Subsequent processes dry the gas, liquefy and cool it, resulting in chlorine approximately 99.9% pure. Above is one of five producing units from which Mathieson supplies quality chlorine to industries from Canada to the Gulf.

Consistent product quality is typical of all Mathieson chemicals. In addition, Mathieson offers consumers the protection of multi-plant production facilities . . . 3 major alkali plants, 7 sulphuric acid plants, 6 caustic soda plants, 3 ammonia plants . . . as well as practical technical assistance with chemical handling and application problems.

In planning your chemical requirements call in your Mathieson representative. Perhaps you can buy to better advantage from one of America's largest producers of basic industrial chemicals.

OLIN MATHIESON CHEMICAL CORPORATION

INDUSTRIAL CHEMICALS DIVISION

BALTIMORE 3, MARYLAND

MATHIESON

2622

CAUSTIC SODA • SODA ASH • CHLORINE • SULPHURIC ACID • SULPHUR • AMMONIA • NITRATE OF SODA • BICARBONATE OF SODA • CARBON DIOXIDE • SODIUM CHLORITE • CALCIUM HYPOCHLORITE
ETHYLENE OXIDE • ETHYLENE GLYCOL • DIETHYLENE GLYCOL • TRIETHYLENE GLYCOL • POLYGLYCOLS • DICHLORDETHYLETHER • ETHYLENE DICHLORIDE • METHANOL • SODIUM METHYLATE • ETHYLENE DIAMINE

Memorial Hospital after a week's illness of poliomyelitis. A native of New York, he had resided in Summit, N. J., for the past four years. He is survived by his wife, the former Sue Wiggs; three daughters, Misses Nancy L., Betty S. and Christine M. Limbach, and his mother, Mrs. Matilda Anderson Limbach of New York:

Edwin O. Heckman, 63, an industrial salesman for Colgate-Palmolive Co., Jersey City, died of heart disease at his home in St. Louis, Aug. 13.

—★—

New Namico Cleaners

The development of "Namico 444," a newly formulated all purpose cleaner and sanitizer was announced early this month by National Milling & Chemical Co., Philadelphia. Recommended use dilution of the new disinfectant and hard surface cleaner is two ounces to a gallon of water or ¾ of a cup to a 12-gallon pail. The product is designed for use on floors, woodwork and walls. At the same time the company announced a new controlled-action detergent, "Snap," that is designed for home, institutional and commercial laundering. It is recommended by the maker for general household use and for washing all fabrics, including baby clothes.

—★—

Becco Advances Two

Dr. H. O. Kauffmann, technical director, has been appointed to the board of directors and John F. Shea, sales manager, has been elected secretary and treasurer of Buffalo Electro-Chemical Co., a division of Food Machinery and Chemical Corp., New York, it was announced recently.

H. O. Kauffmann

J. F. Shea

Vulcan Appoints Hoover

The appointment of Donald R. Hoover as sales representative assigned to the greater metropolitan

Donald R. Hoover

Chicago area was announced last month by Herbert B. Scharbach, vice-president and sales manager of Vulcan Stamping & Mfg. Co. and Vulcan Tin Can Co., both of Bellwood, Ill. A graduate of Michigan State University, where he majored in economics and marketing, Mr. Hoover spent three years following his graduation in the Army, achieving the rank of first lieutenant in the Quartermaster Division.

—★—

Hooker Names Miller

The advancement of Harris C. Miller to the post of New York district sales manager of Hooker Electrochemical Co., Niagara Falls, N. Y., was announced Sept. 3 by Robert E. Wilkins, vice-president and general sales manager. Mr. Miller was formerly assistant New York district sales manager. He succeeds William F. George who retires at the end of this month.

Mr. Miller joined Hooker in 1941, following his graduation from Worcester Polytechnic Institute, where he received a B.S. degree in chemical engineering. He served as chemical engineer in the operations department until 1949, when he was transferred to the sales department. He shortly became a salesman in the New York district. During 1951 and 1952 his sales territory was western New York and western Pennsylvania with headquarters at Niagara Falls.

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Detergent Sales Gain

Synthetic detergents sales, both in terms of tonnage and dollar volume, continued their upward climb during the first six months of 1954. Soap sales on a tonnage and dollar volume basis fell below last year's totals in the first half of 1954. The synthetic detergents now reprsent 58.4 percent of the market for soaps and synthetic detergents.

Figures for the first half of 1954 were released last month by the Association of Soap & Glycerine Producers, Inc., New York. The statistical information compiled by the association is based on reports of member companies.

Reported sales of all synthetics for the first half of 1954 totaled 1,021,146,000 pounds, valued at $232,432,000, against 902,307,000 pounds, worth $205,995,000 for the first six month of 1953. Thus, tonnage was up 13.2 percent and dollar volume was up 12.8 percent in the first half of this year over the comparable 1953 period.

Sales of solid and liquid soap for the first six months of 1954 amounted to 727,623,000 pounds, down 10 percent from the comparable 1953 period. Dollarwise soap sales in this year's first half were $157,727,000, as against $159,168,000 last year, or a decline of 0.9 percent.

Liquid detergent sales in the first half of 1954 amounted to 55,448,000 pounds, compared with 41,152,000 a year ago, or a 34.7 percent increase. Sales of liquid detergents in terms of dollars were $26,259,000 for the first half of '54, a 33.5 percent increase over last year's first half.

—★—

Paul & Stein Relocate

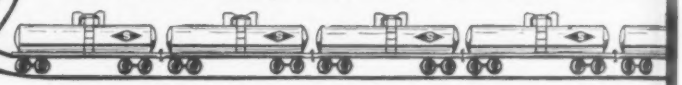
F. H. Paul & Stein Bros., Inc., have recently moved their offices to 235 Fifth Ave., New York. They were formerly located at 100 Gold Street.

THE SWITCH IS TO...

FATTY ALCOHOL SULFATES

The new Stepan line of fatty alcohol sulfates can offer important advantages for use in a wide range of detergent formulations.

In heavy-duty detergent, bar detergent, liquid detergent, and shampoo formulations these fatty alcohol sulfates offer superior washing qualities, emolliency, and the elimination of scum and bowl rings for hard water areas. They can provide excellent detergency without excessive soaking and foam for on-the-job rug cleaners and for use in textile scouring compounds. Their superior emulsifying properties make them ideal, too, for use in skin creams or other products that are rubbed into the skin.



STEPAN FATTY ALCOHOL SULFATES . . . GENERAL SPECIFICATIONS

	% Sodium Alkyl Sulfate	% Unsulfated Alcohols	% Sodium Sulfate	% Sodium Chloride	% Moisture	pH
STEPANOL M 1, M 2	28.0-30.0	1.5-3.5	1.0-2.5	0.5-1.5	62.5-69.0	7.0-8.5

Write for free Samples...

Stepan fatty alcohol sulfates are available for use as an important component in your present formulation or in a combination from the extensive Stepan line of fatty alcohols and synthetic detergents as a completed formulation tailored to your particular requirements.

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20 No. Wacker Drive
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FATTY ALCOHOLS · FATTY ALCOHOL SULFATES · BULK LIQUID DETERGENTS · SULFONATED OILS · AMIDES · FOAM STABILIZERS · ALKYLPHENOL POLYALKOXY SULFATES

Wyandotte Ups Sanborn

Charles F. Sanborn, manager of the M. A. Division Market Research Department of Wyandotte

Charles F. Sanborn

Chemicals Corp., Wyandotte, Mich., was recently advanced to senior sales representative in the company's eastern district office. He is making his headquarters in New York. A Phi Beta Kappa graduate of Duke University, Mr. Sanborn has been with Wyandotte for 13 years, nine of them doing market research. He has been department manager since 1951.

—★—

F. D. Snell Expands

The fourth expansion of Foster D. Snell, Inc., New York, since 1947 when the firm acquired its present 10 story building at 29 W. 15th St., housing office and laboratories, was announced recently by Dr. Foster Dee Snell, head of the 35 year old consulting firm.

The new acquisition of leased space at 42 W. 15th St. will be in addition to the other facilities owned in New York City and at Bainbridge, N. Y. For the present all correspondence and telephone calls are being handled at 29 W. 15th St.

—★—

Detergents from Sugar

New cleansing agents are now being made experimentally from sugar and are "effective, mild and inexpensive," according to a recent announcement by Dr. Henry B. Hass, president of Sugar Research Foundation, Inc. Dr. Hass predicted that detergents made from sugar will "help to usher in the new age of sucrochemistry." The word recently coined covers the growing branch of industrial organic chemistry in which the starting material is sugar and its by-products. Dr. Hass, former head of the chemistry department of Purdue University, compared sucrochemistry to "petrochemistry," in which petroleum and natural gas are the starting materials.

Dr. Hass also reported that work is progressing on the use of sugar and its by-products as the starting materials for insecticides, solvents, plastics and fibers, as well as detergents.

—★—

Bobrick Export Reps.

The appointment of Dayton, Price and Co., Ltd., as export managers for Bobrick Dispensers, Inc., Los Angeles, Calif., was announced recently by William S. Louchheim, president of Bobrick, upon his return from Europe. The Ambard Division of Dayton, Price, which specializes in building materials and allied products, is handling the complete Bobrick line of soap dispensers in all exports markets, with the exception of Canada, where Bobrick's Canadian factory representative, Wyant and Co., Ltd., handles sales.

—★—

Dow TV Show

"Medic," a new NBC-TV program to be sponsored by Dow Chemical Co., Midland, Mich., was officially introduced to food brokers throughout the U. S. by closed television Aug. 20. This marks the first time that closed circuit TV has been used by a chemical or plastics manufacturer.

—★—

Rego Labs. New Offices

Rego Laboratories, consultants in the chemical specialties field, recently announced the opening of new offices at 150 Broadway, New York 38. Extensive manufacturing facilities for private label work have been acquired, the company announced at the same time.

Bukaty Joins Gen. Aniline

Raymond M. Bukaty has been named director of marketing on the staff of executive vice-pres-

Raymond M. Bukaty

ident John H. Hilldring of General Aniline & Film Corp., New York, it was announced early this month. Before joining General Aniline, Mr. Bukaty was with the management consulting firm of Booz, Allen & Hamilton and previously was a marketing executive with General Electric Co.

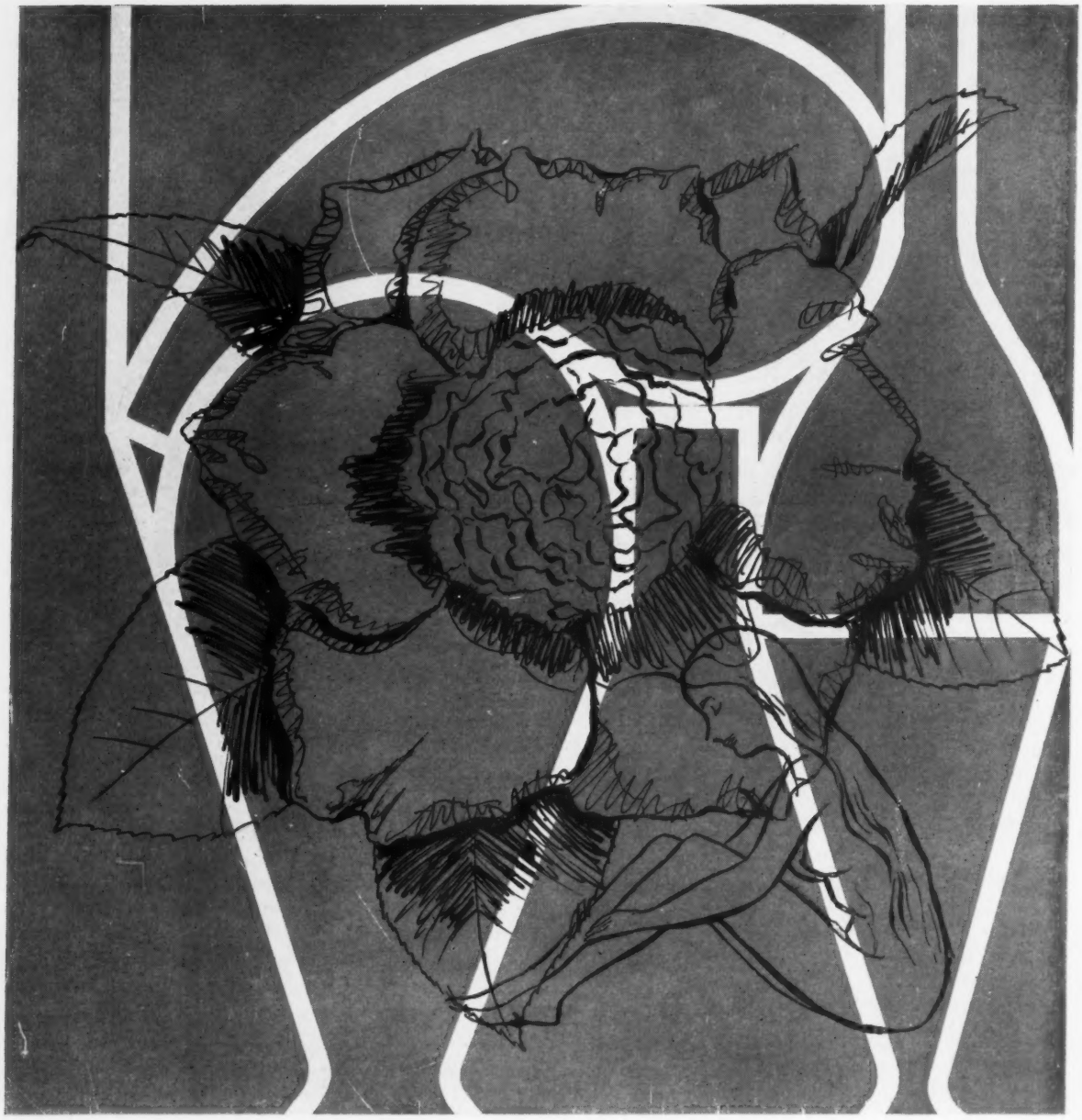
—★—

Guild to Hear Brenn

J. L. Brenn, president of Huntington Laboratories, Inc., Huntington, Ind., will deliver the principal address at the convention banquet, Wednesday evening, Nov. 10, during the annual convention and trade show of the Industrial Housekeeping Safety Guild. The meeting will be held at the Hotel Ambassador in Atlantic City, N. J., Nov. 6 to 11.

Mr. Brenn will also open the meeting program with an informal address of welcome at a luncheon at the Hotel Ambassador, Sunday, Nov. 7.

Also scheduled to address the meeting is Don Coppell, vice-president of Wagner Baking Co., Newark, N. J.; Alan Rosenstock, head of Baer Paper Co., Baltimore sanitary supply firm, and Dr. Murray Banks, New York professor of psychiatry, who addresses the luncheon meeting, Wednesday, Nov. 10. He will speak on "What to Do until



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the Psychiatrist Comes." Also scheduled to speak is Thomas M. Shea, chief design engineer for Sharp & Dohme, Philadelphia pharmaceutical manufacturing firm; Dan Granato, service manager for Sharp & Dohme and chairman of the Pennsylvania Section of the Industrial Sanitation Management Association. Abraham Levy, special deputy attorney general of Pennsylvania and president of the Industrial Housekeeping Safety Guild, Inc., and Dr. Harry Beloff, Philadelphia physician, and vice-president and director of research of the Guild will also speak.

In addition to individual and panel discussions of various aspects of sanitation, approximately 150 booths and exhibits are expected to be set up for the meeting, which will occupy the first three floors of the Ambassador Hotel, according to William Plowfield, director of the Guild.

—— ★ ——

Stepan Names Tomlinson

The appointment of William F. Tomlinson as director of research and development of Stepan Chemical Co., Chicago, was announced early this month. Mr. Tomlinson was formerly director of research and development for Fels and Co., Philadelphia. He joined Stepan Chemical Co. in 1952 and served as a technical representative in the field before assuming his new capacity of heading the company's newly expanded laboratory facilities at its plant on S. Kedzie Ave.

William F. Tomlinson

Recent airplane view of a section of Shea Chemical Corporation's new 80,000 ton sodium phosphate plant at Jeffersonville, Ind. Photo was taken during a final phase of the construction.

New Shea Sodium Phosphate Plant

SODIUM phosphate units at the new Jeffersonville, Ind., plant of Shea Chemical Corp., Baltimore, were brought into production recently, according to an announcement by Vincent H. Shea, president. Shea entered the elemental phosphorus field in 1952 with the construction of the largest phosphorous furnace in the U. S. at Columbia, Tenn.

Sodium tripolyphosphate, tetrasodium pyrophosphate and the intermediate mono and disodium phosphates are the initial products of Shea's new Jeffersonville plant. Sodium hexametaphosphate and other inorganic phosphates will eventually be produced, the company predicts. The latest design features have been incorporated in the new Jeffersonville plant, where production is claimed to be simplified by the use of high grade phosphoric acid made from elemental phosphorus. Thus involved purification steps, necessary when "wet process" phosphoric acid is used, have been eliminated.

The 30 acre site has a Pennsylvania railroad connection and access to main truck highways which permit ready shipment to eastern points or west to the Rockies. The plant is proximate to several of the large detergent producing firms.

Capacity for tripolyphosphate and tetrasodium pyrophosphate is estimated at 80,000 tons per year.

Shea also produces phosphoric acid for the food, fertilizer and chemical industries, calcium phosphates and other products at its plants at Columbia, Tenn. and Adams, Mass.

A laboratory for technical service and development work, and an office building to house main accounting, engineering, purchasing and traffic department staffs are under construction at Jeffersonville.

—— ★ ——

Pyrethrum Expansion Plans

A five-year plan, to be supported by a £5,000,000 British loan, to intensify farming in Africa's Kenya colony, will aid in the expansion of lands and crops of pyrethrum. The Swynnerton plan to develop African agriculture is expected to increase present pyrethrum raising acreage from 1,300 to 48,300, produced by 96,000 growers. Should the total areas be fully developed, they would yield 10,000 tons of dried pyrethrum flowers valued at £1,800,000, as compared with present total Kenya production of 2,500 tons. The pyrethrum acreage and crop development program is expected to take place over the next 10 to 15 years.

The Kisii Highlands area of South Nyanza is likely to become the chief pyrethrum producer with 15,000 acres. Next would be Fort Hall with 10,000, followed by Kiambu with 8,000. Other areas to be planted include Nandi, Elgeyo, and West Suk, Nyeri, Meru and Embu.

WYANDOTTE CHEMICALS

Formulators of laundry detergents:

Your next big product advantage

Looking for a surface-active agent that will improve your home or commercial laundry detergents? Your answer may be here, in Wyandotte Pluronics! For Pluronics do what no other surfactant can do — provide an over-all balance of the following properties:

1 **Ease of formulation**
2 **Stability in solution**
3 **High detergency**
4 **Compatibility with a wide variety of materials**
5 **Controlled sudsing**

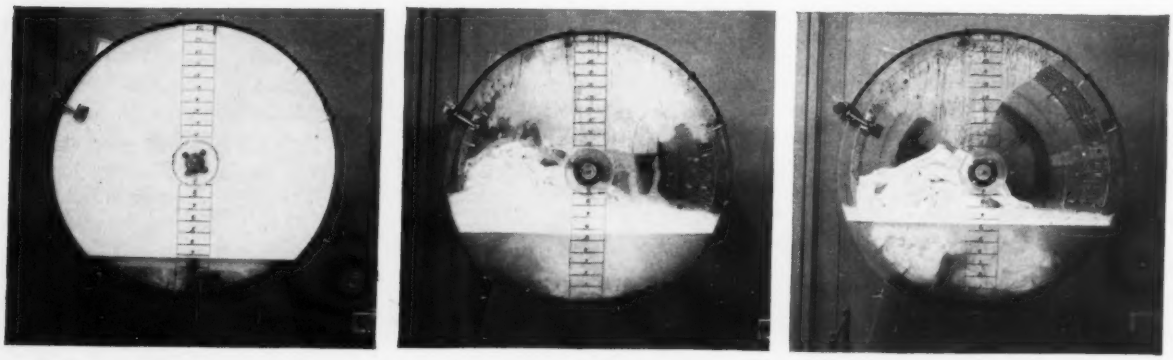
WHAT ARE THE PLURONICS?

The Pluronics are a new series of 100%-active nonionic surface-active agents that offer unique flexibility to meet almost any laundry detergent requirement. Pluronics are available in various molecular weights, ranging from less than 2,000 to over 8,000, and have a viscosity range from a thin liquid to a solid. Pluronics L44, L61, L62, L64 (liquids); P75 (paste); and F68 (flake, powder or solid-cast) have become standard grades.

WHY ARE PLURONICS ESPECIALLY VALUABLE IN HOME AND COMMERCIAL LAUNDRY DETERGENTS?

Ease in formulation, stability in solution, high detergency, compatibility, controlled sudsing—the over-all balance of these desirable properties makes the Pluronics the most versatile agents of their type available. Suds level, detergent power, carbon soil removal and whiteness retention can be varied by changing the Pluronic or combination of Pluronics in the formula. The Pluronics have no tendency to migrate into the crystalline structure of the other constituents; therefore, their dedusting effect is permanent. Moreover, there is no increase in moisture pickup. Due to low-sudsing characteristic, the Pluronics rinse rapidly; they are also relatively nontoxic, odorless and tasteless.

Suds comparison of home detergents



Popular high-sudsing detergent *Popular low-sudsing detergent* *New detergent containing Pluronics*

*Report on Wyandotte Pluronics**

may come from the Pluronics!

ARE THE PLURONICS EASY TO FORMULATE?

You can choose the type that best fits your formulating process—liquid, paste, flake, powder or solid-cast. Viscosities are easily controlled. The liquid Pluronics can be spray-blended by special spray systems or by paint sprayers, sprinkling cans or nail-punctured drums suspended over mixing apparatus. Pluronic F68 (flake or powder) permits you to compound a quality product using only solid materials; it blends easily with all common builders.

WHAT ABOUT CONTROLLED SUDSING?

Extensive tests prove the Pluronics are the lowest-foaming nonionics on the market today. By properly compounding Pluronics with high-foaming anionic detergents, suds can be adjusted to any desired level.

HOW ARE THE PLURONICS USED IN THE FORMULATION OF LAUNDRY DETERGENTS?

The inherent flexibility of the Pluronics makes it easy to formulate compounds with optimum characteristics; the Pluronic or combination of the Pluronics to be used would depend on the suds level and detergent power you desire. Laboratory experiments reveal that an ideal formulation would involve a ternary system including the Pluronics, Kreelon* 4D (alkylarylsulfonate) and Carbose* D (sodium CMC), along with the usual alkali, metasilicate and complex phosphates. This combination results in products of superior cleaning properties, particularly useful when complex soil conditions are encountered.

WHAT ARE SOME OF THE PLURONICS' OTHER APPLICATIONS?

Other applications where Pluronics are in actual use, or show considerable promise, are: water conditioning, boiler water compounds, metal cleaning and cutting, soaps, cosmetics and mechanical-dishwashing compounds.

HOW CAN I FIND OUT MORE ABOUT THE PLURONICS?

Call your local Wyandotte representative, or write us direct. We will supply the proper samples of the Pluronics, a data sheet summarizing their physical and surface-active properties, and other technical and price information. Mail coupon today! *Wyandotte Chemicals Corporation, Wyandotte, Michigan. Offices in principal cities.*

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Department SCS-9, Wyandotte, Michigan

Please send:

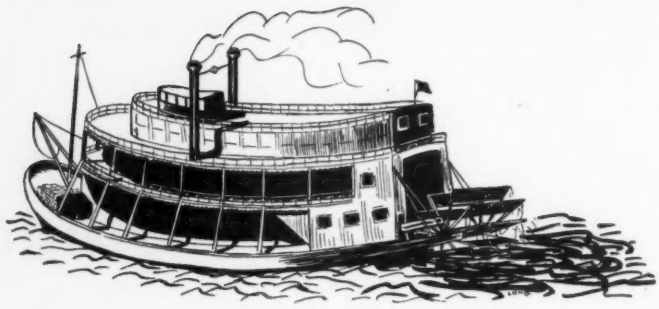
☐ Data on the use of Pluronics in home and commercial laundry detergents ☐ Samples of Pluronic L62, L64, F68 and P75 for evaluation in laundry detergents ☐ Have your representative call

Name_____

Firm_____ Title_____

Address_____

City_____ State_____



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ANIMAL FATS

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FATTY ACIDS

Red Oil, Tall Oil, Tallow
Stearic Acid
Hydrogenated Fatty Acid
Cottonseed and Soybean Fatty Acids

ALKALIES

Caustic Soda, Solid, Liquid, and Flake; Soda Ash, Light and Dense
Carbonate of Potash, calcined and hydrated
Calcium Chloride
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Tetra Pyro Phosphate
Quadrafos Granular and Beads—a stable polyphosphate for water conditioning and mild but effective detergency.

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METASILICATE—"Metso"* Granular.
METSO* DETERGENTS—55, 66, 99.
MAYPONS—Unique surface active agents; prolific foam; high detergency and emulsifying powers; suitable for cosmetic and industrial use.

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PERFECT FOR PERFUMING...

- LAUNDRY SOAPS
- WASHING POWDERS
- LIQUID CLEANSERS
- POLISHES, ETC.

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- It's a manufactured article . . . free from the price fluctuations of natural essential oils such as Citronella, Sassafras, etc.
- Its high quality never varies, enabling you to manufacture uniformly dependable products.
- Always lower in cost than the natural oils, particularly now with citronella prices so high. Its use results in production economies and higher profits without lowering quality standards.

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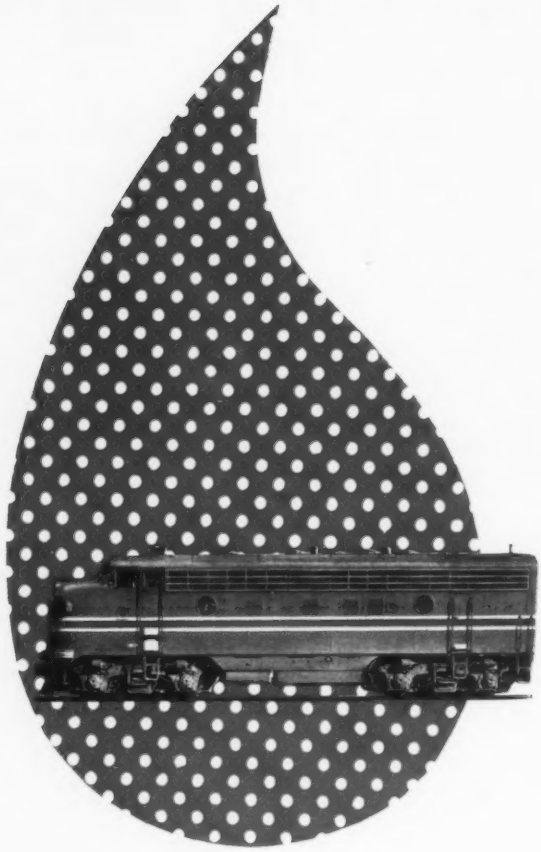

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SANTOMERSE IONICS
STEROX NONIONICS
complete line of PHOSPHATES

Now you can obtain *all* your wetting-agent and phosphate requirements from *one* source. Less red tape, less waiting and faster service . . . all are yours when you use *one* source . . . Monsanto.

You have a complete range of choice. Whether you need anionics like Santomerse,* nonionics like Sterox,* or one of Monsanto's many phosphates, you will find exactly the type wetting agent and phosphate that's best for *your* products.

Monsanto's Santomerse No. 1, for example, gives you these advantages:

- Increased Wetting Power
- Good Detergency
- Excellent foaming and grease emulsification

Why not let Monsanto's technical service group work with your staff to determine the type wetting agent and phosphate best for your products? For more information, write MONSANTO CHEMICAL COMPANY, Inorganic Chemicals Division, 1700 South Second Street, St. Louis 4, Missouri.

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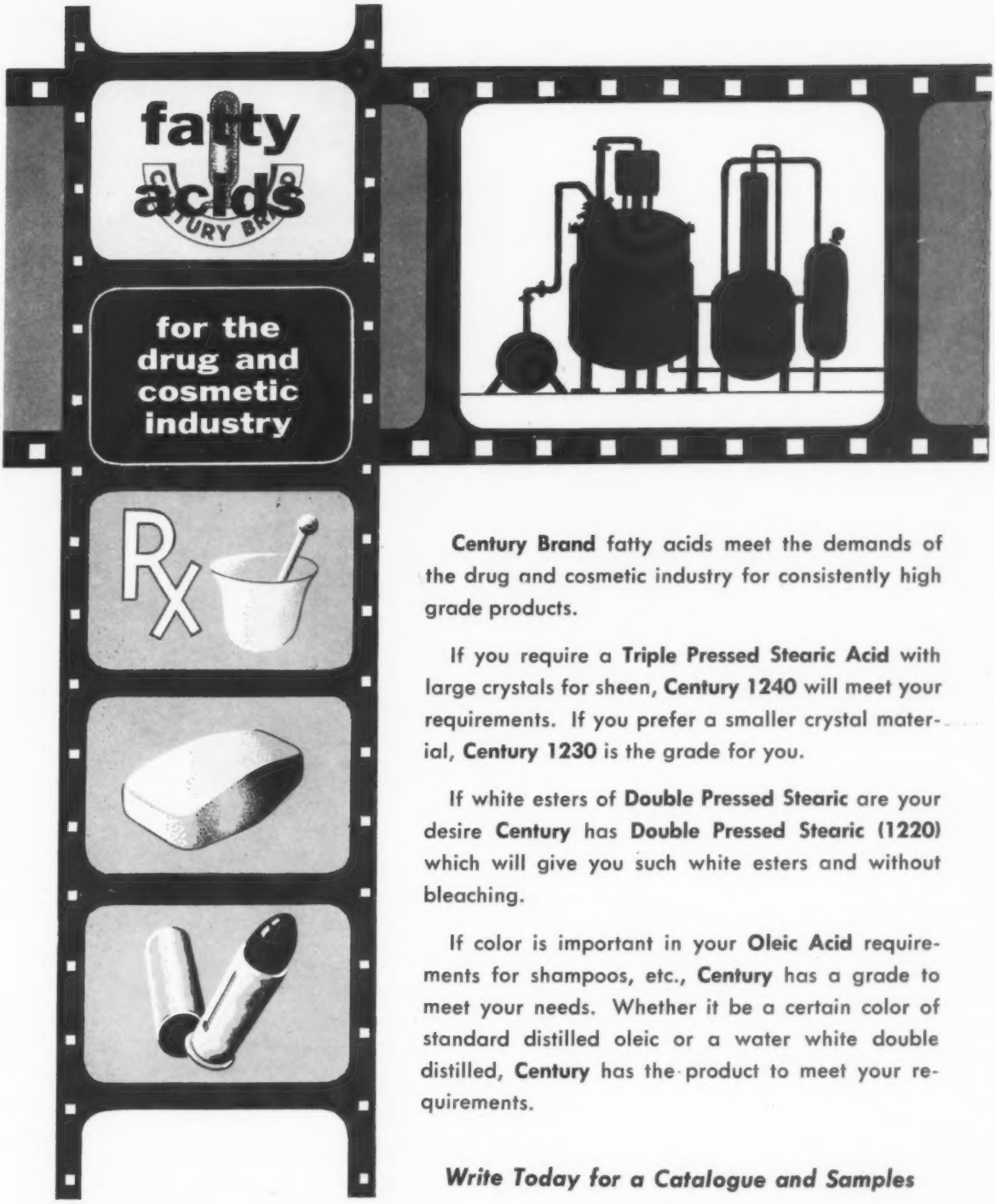
SERVING INDUSTRY...WHICH SERVES MANKIND

*Trade-mark Reg. U. S. Pat. Off.



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If you require a **Triple Pressed Stearic Acid** with large crystals for sheen, **Century 1240** will meet your requirements. If you prefer a smaller crystal material, **Century 1230** is the grade for you.

If white esters of **Double Pressed Stearic** are your desire **Century** has **Double Pressed Stearic (1220)** which will give you such white esters and without bleaching.

If color is important in your **Oleic Acid** requirements for shampoos, etc., **Century** has a grade to meet your needs. Whether it be a certain color of standard distilled oleic or a water white double distilled, **Century** has the product to meet your requirements.

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SUBSTANTIAL NEW CAPACITY

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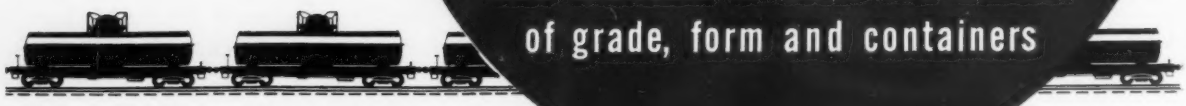
Now available in these five choices of grade, form and containers



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   45% Liquid, Solid and Flake
2. Special 50% Liquid
   Tank Cars out of South Charleston, W. Va.;
   10% less water to pay freight on!
3. 4000, 6000, 8000 & 10,000 gallon tank cars
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4. Tank Wagons (up to 3000 gallons) out of stock points.
5. 660 lb. Drums of Liquid 45%, carload or l.c.l. out
   of Carteret, N. J. or South Charleston, W. Va.

As you want it, how you want it, where you want it . . . that's the quick story of WESTVACO Caustic Potash. Next time you're in the market for KOH, get a price and delivery quotation from Westvaco.

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Bids and AWARDS

Insect Repellent Bids

Montrose Chemical Co., Newark, N. J., and Octagon Process, Inc., Staten Island, N. Y., were the low bidders on insect repellent in a recent opening for miscellaneous supplies by the Navy Purchasing Office, New York. Montrose bid $4.16 on item 1, and Octagon bid $3.720 on item 2.

—★—

Soap Powder Awards

In a recent opening for 6,000 pounds of soap powder by the Post Office Department, Washington, D. C., Murro Chemical Co., Portsmouth, Va., won the award on item one with a bid of 7.8 cents and Kamen Soap Products Co., Barberton, O., on item two with a bid of 7.99 cents.

—★—

Shell, Standard Low Bids

Shell Oil Co., and Standard Oil Co., both of San Francisco, were the low bidders on dry cleaning solvent in a recent opening for miscellaneous supplies by the Armed Services Petroleum Agency, Arlington, Va. Shell bid 11.65 cents on 840,000 gallons, fob San Pedro and 11.75 cents on 210,000 gallons on item 1a, and Standard Oil bid 12.7 cents, delivered Richmond refinery wharf, on item 1b.

—★—

P. O. Soap Bids

The following bids were received on soap for various deliveries in a recent opening for miscellaneous supplies by the Post Office Department, Washington, D. C. Murro Chemical Co., Portsmouth, Va., $9,600, Chicago; $3,900, Kansas City; Swift & Co., Chicago, $8,384, Chicago; $3,297, Kansas City; Colgate Palmolive Co., Jersey City, N. J., $10,197.60, Chicago; $3,975.90, Kansas City; Procter & Gamble, Cincinnati, $7,680, Chicago; $3,057, Kansas City; Stahl Soap Corp., Brooklyn, $7,984, Chicago; $3,288, Kansas City; Unity Sanitary Supply Co., New York, 15 cents a pound, Chicago, and 17 cents per pound, Kansas City.

—★—

FSS Soap Awards

In a recent opening for soap by the Federal Supply Service, Los Angeles, awards were won by Colgate-Palmolive Co., San Francisco, with a bid of 5.55 cents on item 1, 27,000 pounds laundry and Swift & Co., Los Angeles, with a bid of 22.4 cents on item 2, 6,250 pounds toilet soap.

—★—

Low DDT Bids

The following low bids were submitted on DDT in a recent opening for miscel aneous supplies by the Navy Purchasing Office, New York. Octagon Process, Staten Island, N. Y., 35.3 cents, item 1a; 38.6 cents, item b; 35.1 cents, item c. Heckathorn, Inc., Richmond, Calif., 33.21 cents, item 1d; 34.68 cents, item e; 34.59 cents, item f. York Chemical Co., Brooklyn, 36 cents, item 1g.

—★—

Federal Supply Awards

In a recent opening for miscellaneous supplies by the Federal Supply Service, Denver, Spec-Kem Co., Chicago, received two awards on dishwashing compound, and Bostwick Laboratories, Bridgeport, Conn., received the award on aerosol bombs. Spec-Kem bids were 8.9 cents on item a, award one, and 8.75 cents, 12,000 pounds on item 2, award two. Bostwick bid 53.9 cents each on item 1.

—★—

FSS Soap Awards

In a recent opening for soap by the Federal Supply Service, Boston, awards were made to seven companies with the following low bids. Judson Dunaway Corp., Dover, N. H., item 1, 11.4 cents; Trio Chemical Works, Inc., Brooklyn, item 3, 17 cents; Pal Products Mfg. Corp., Brooklyn, item 4, 6.5 cents; Colgate Palmolive Co., Jersey City, item 5, 35.168 cents; Swift & Co., Chicago, item 6, 22.4 cents and item 7, 13.46 cents; Stahl Soap Corp., Brooklyn, item 8, 10.12 cents; Double B Products Co., Rockville, Conn., item 9, 15 cents. No bids were received on item 2.

—★—

Soap Powder Award

In a recent opening for soap powder by the Federal Supply Service, Kansas City, Mo., Clarkson Laboratories, Philadelphia, won the award with a low bid of 49.74 cents on item 1, and 51.35 cents on item 2.

—★—

Low Scouring Powder Bid

Federal Chemical Co., Chicago, submitted the low bid of $534.72 on scouring powder in a recent opening for miscellaneous supplies by the Post Office Department, Washington, D. C.

—★—

Low Standard Soap Bid

Standard Soap Co., Camden, N. J., submitted the low bid of $3.132 on laundry soap in a recent opening for miscellaneous supplies by the Federal Supply Service, New York.

—★—

Aerosol Award to Airosol

Airosol Co., Neodesha, Kansas, won the award on aerosol insecticides with a low bid of 54.3 cents in a recent opening for miscellaneous supplies by the Federal Supply Service, Kansas City, Mo.

—★—

CSC Advances Farley

James A. Farley has been named field sales manager of the industrial chemicals sales department, it was announced late last month by F. E. Maple, general manager of the department, a unit of the petrochemicals division of Commercial Solvents Corp., New York.

In this post, a new one with the company, Mr. Farley is responsible for the administration of district offices throughout the United States.

Mr. Farley has been with Commercial Solvents Corp. since 1935, most recently as district manager of the Boston office.

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In a wide range of attractive odors

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Carefully adjusted to the evaporation rate of the blocks and crystals.

Available with and without color.

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NEW Trade Marks

THE following trade marks were published in recent issues of the *Official Gazette* of the U. S. Patent Office in compliance with section 12(a) of the Trade Mark Act of 1946. Notice of opposition under section 13 may be filed within 30 days of publication in the *Gazette*. See rules 20.1 to 20.5. As provided by section 31 of the Act, a fee of $25 must accompany notice of opposition.

Carpet glo—This is for dry cleaning compound for carpets, rugs, upholstery and other fabrics. Filed Sept. 3, 1952 by Specialty Chemicals, Inc., South Boston, Mass. Claims use since Dec. 5, 1950.

LOOK—This for bar soap and a liquid detergent. Filed Mar. 9, 1953 by Andrew Jergens Co., Cincinnati. Claims use since Feb. 12, 1953.

MARY-JO — This for liquid cleaning compound and stain remover. Filed June 3, 1953 by Joel C. Henry, Detroit. Claims use since June, 1952.

Armen "98"—This for cleaning and spot removing fluid. Filed Oct. 9, 1953 by Armen Chemicals, Inc., Ann Arbor, Mich. Claims use since Sept. 5, 1953.

SKELLY—This for windshield washer solvent. Filed Jan. 12, 1954 by Skelly Oil Co., Kansas City, Mo. Claims use since Dec. 1948.

FORE—This for synthetic detergent. Filed Jan. 14, 1954 by Beach Soap Co., Lawrence, Mass. Claims use since Dec. 2, 1953.

Powder-ene — This for dry cleaning powder for rugs. Filed Nov. 10, 1953 by Von Schrader Mfg. Corp., Racine, Wis. Claims use since Feb. 1941.

PIVAL—This for rodenticides, Filed Oct. 9, 1952 by Montomco, Inc., New York. Claims use since Aug. 20, 1952.

GUARDEX—This for industrial germicide and disinfectant. Filed Dec. 9, 1952 by Purex Corp., Ltd., South Gate, Calif. Claims use since Oct. 15, 1952.

FELSOL—This for alkyl alcohol sulfates. Filed Aug. 21, 1953 by Fels & Co., Philadelphia. Claims use since Aug. 10, 1953.

SHUR-LEAF—This for insecticide. Filed Dec. 7, 1953 by General Insecticide Co., Utica, N. Y. Claims use since Sept. 15, 1951.

SPORT OF KINGS—This for shave soap. Filed Aug. 22, 1951 by Gourielli, Inc., now by merger H. R. Laboratories, Inc., New York. Claims use since May 25, 1951.

TRESS—This for shampoos. Filed Dec. 8, 1951 by Jules Montenier, Chicago. Claims use since Jan., 1934.

ATLAS—This for automobile windshield washer fluids. Filed March 4, 1952 by Atlas Supply Co., Newark, N. J. Claims use since Oct. 4, 1951.

CRYSTAL ARROW—This for soap chips and flakes. Filed June 24, 1952 by B. A. Railton Co., Chicago. Claims use since at least as early as 1923.

Cream White—This for sudsing cleaner, cleanser and detergent. Filed Feb. 26, 1953 by Hewitt Soap Co., Dayton, O. Claims use since Feb. 19, 1935.

Mac Thrift—This for household detergent. Filed April 2, 1953 by Clyde Chemical Co., Phenix, R. I. Claims use since Dec. 17, 1952.

PAX F-54—This for floor cleaning compound to remove grease. Filed April 10, 1953 by G. H. Packwood Mfg. Co., St. Louis. Claims use since Jan. 16, 1932.

Topsall—This for hand soap. Filed April 10, 1953 by Nicholas J. Salerno, Vienna, O. Claims use since Oct. 6, 1952.

Fabriclean—This for cleaning fluid for upholstery, rugs and wood surfaces. Filed May 28, 1953 by Eldred's, Saginaw, Mich. Claims use since June 1, 1952.

DUSTONE—This for sweeping compound. Filed June 4, 1953 by Best Products Mfg. Co., Inc., doing business as Dustone Mfg. Co., Norfolk, Va. Claims use since May 21, 1953.

sho off—This for polish removing preparation for linoleum, rubber and ceramic tiles and wood floors. Filed June 17, 1953 by Jaton Products Corp., Brooklyn, N. Y. Claims use since Dec. 22, 1952.

GOURIELLI—This for toilet and shaving soaps. Filed June 25, 1953 by Gourielli, Inc., New York. Claims use since on or about May 1941.

KOLOR-TREET—This for hair coloring shampoo. Filed Nov. 9, 1953 by Duart Mfg. Co., San Francisco. Claims use since on or about Dec. 10, 1945.

PRESTONE—This for cleaner for automotive cooling systems. Filed Nov. 20, 1953 by Union Carbide & Carbon Corp., New York. Claims use since on or about May 18, 1953.

ROUX—This for hair shampoo. Filed Nov. 24, 1953 by Roux Distributing Co., New York. Claims use since Dec. 1934.

TERRIFIC, COLOSSAL—Both for shampoo cleaners for rugs, upholstery, clothing, auto interiors, etc. Filed Feb. 24, 1954 by Globe Products of Florida, Clearwater, Fla. Claims use since Jan. 12, 1954.

SHAMPION—This for hair shampoo. Filed Feb. 24, 1954 by Jean Jordeau, Inc., South Orange, N. J. Claims use since Feb. 15, 1954.

PINESOLA—This for disinfectants and deodorizers for household and industrial use. Filed Feb. 1, 1954 by Mary Louise Shepard, doing business as Shepard's Chemical Works, Wilmington, N. C. Claims use since on or about Mar. 21, 1928.

tel-o-cide—This for deodorizing and disinfecting pads for telephones. Filed Mar. 24, 1954 by Harry B. Smith, doing business as Tel-O-Cide Co., New York. Claims use since Mar. 31, 1954.

MOVIDYN—This for colloidal silver compound used as a germicide and bactericide on food containers and food handling equipment. Filed Feb. 23, 1954 by United States Movidyn Corp., Chicago. Claims use since Nov. 28, 1952.

G-931—This for surface active agents. Filed Apr. 14, 1954 by Atlas Powder Co., Wilmington, Del. Claims use since May 5, 1949.

ORINOCO BOILER COMPOUND—This for boiler cleansing compound. Filed Mar. 16, 1953 by Wallace Phippen, doing business as Orinoco Compounding Co., Coalinga, Calif. Claims use since Sept. 1, 1951.

KWIK FLO—This for drain cleaner and opener. Filed Mar. 19, 1953 by Climalene Co., Canton, O. Claims use since Mar. 3, 1953.

PLURAC—This for equipment cleaning compound for the food and beverage industries. Filed Mar. 20, 1953 by Wyandotte Chemicals Corp., Wyandotte, Mich. Claims use since Dec. 19, 1952.

KLEENMASTER NEO-GLAZE — This for dust repellent cleaning composition for metals, glass, plastics, etc. Filed June 29, 1953 by Chemical Products Co., Omaha. Claims use since June 12, 1952.

Rug-magic—This for liquid, non-inflammable cleaner for rugs, upholstery, etc. Filed Nov. 9, 1953 by It's Magic, Inc., Minneapolis. Claims use since May 12, 1953.

pro-fesh—This for dry cleaning fluids. Filed Dec. 2, 1953 by Pro-Fesh Products, Inc., New York. Claims use since Sept. 4, 1953.

KELA-TROL—This for chemical compound for cleaning and sanitizing bottles. Filed Dec. 7, 1953 by Barnett and Co., Indianapolis. Claims use since Oct. 30, 1952.

Rustic — This for shampoo. Filed Feb. 25, 1954 by J. Strickland & Co., Memphis. Claims use since Aug. 31, 1953.

RID-RING—This for cleansing compound for water closet bowls and the like. Filed Mar. 1, 1954 by Turner Chemical Co., Portland, Ore. Claims use since Sept. 1952 and Jan. 8, 1954.

SQUACKY—This for castile soap. Filed Mar. 2, 1954 by Squacky Products, Inc., Long Island City, N. Y. Claims use since Jan. 15, 1954.

AURA WAX—This for combination automobile wax and cleaner. Filed Sept. 2, 1953 by Mitchell K. Pyzyn, doning business as Aura Chemical Co., Chicago. Claims use since June 10, 1953.

RITE RINSE—This for laundry rinse. Filed May 31, 1952 by Economics Laboratories, Inc., St. Paul, Minn. Claims use since April 1, 1952.

Sparklin' White — This for liquid household bleach. Filed Jan. 26, 1953 by Purex Corp., South Gate, Calif. Claims use since Dec. 9, 1952.

calgon—This for water softening and conditioning chemicals. Filed Oct. 9, 1953 by Calgon, Inc., Pittsburgh. Claims use since Oct. 15, 1952.

EXTAR—This for dentifrice. Filed Mar. 5, 1954 by A. J. Parker Co., Philadelphia. Claims use since Feb. 12, 1954.

WHISH—This for liquid hair shampoo. Filed Aug. 9, 1952 by Max Factor & Co., Los Angeles. Claims use since July 25, 1952.

(*Turn to Page* 109)

Newest source for caustic soda

If your plant is in this area you can now have liquid caustic soda delivered more rapidly, more dependably, than ever before.

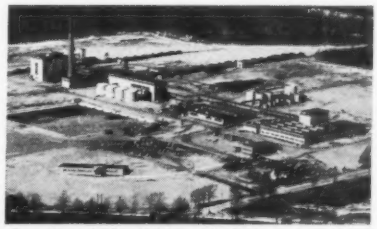
Here's what this new Hooker caustic soda plant at Montague, Mich., means to Midwest industry:

1. **Fast delivery.** You can have caustic soda delivered by tank car, loaded and dispatched within 24 hours of your call. In and near Chicago, tank car deliveries are made from Chicago stocks.
2. **Freight Savings.** Hundreds of users of caustic soda are saving up to $2.84 per ton on freight, as a result of the plant's location, in the heart of the industrial Midwest.
3. **Dockside delivery.** On Lake Michigan and adjacent waterways you can have Hooker caustic delivered by barge—a new Hooker service (minimum 250 tons, dry basis). Savings are substantial.
4. **Prompt service you can count on.** At the Hooker sales office, 1 N. LaSalle St., Chicago, men are ready to help you plan efficient handling and storage, meet emergency needs, work out the most economical purchasing and delivery arrangements.
5. **Smoother, better processing.** You can use constant processing methods, and get consistent results with Hooker caustic soda. It's produced under careful control; more than 20 separate inspections and analyses protect its uniformity.

Tighten up your caustic supply line now

Many industrial leaders in the Midwest are already enjoying the convenience, economy, and dependable supply of Hooker caustic shipped from Montague.

You can have the same convenience and security *tomorrow*. Just pick up your phone and call us.



Caustic soda for Midwest Industry comes from this new $12 million Hooker plant at Montague, Mich. The plant is built over a tremendous bed of pure salt, which supplies the caustic-producing cells.

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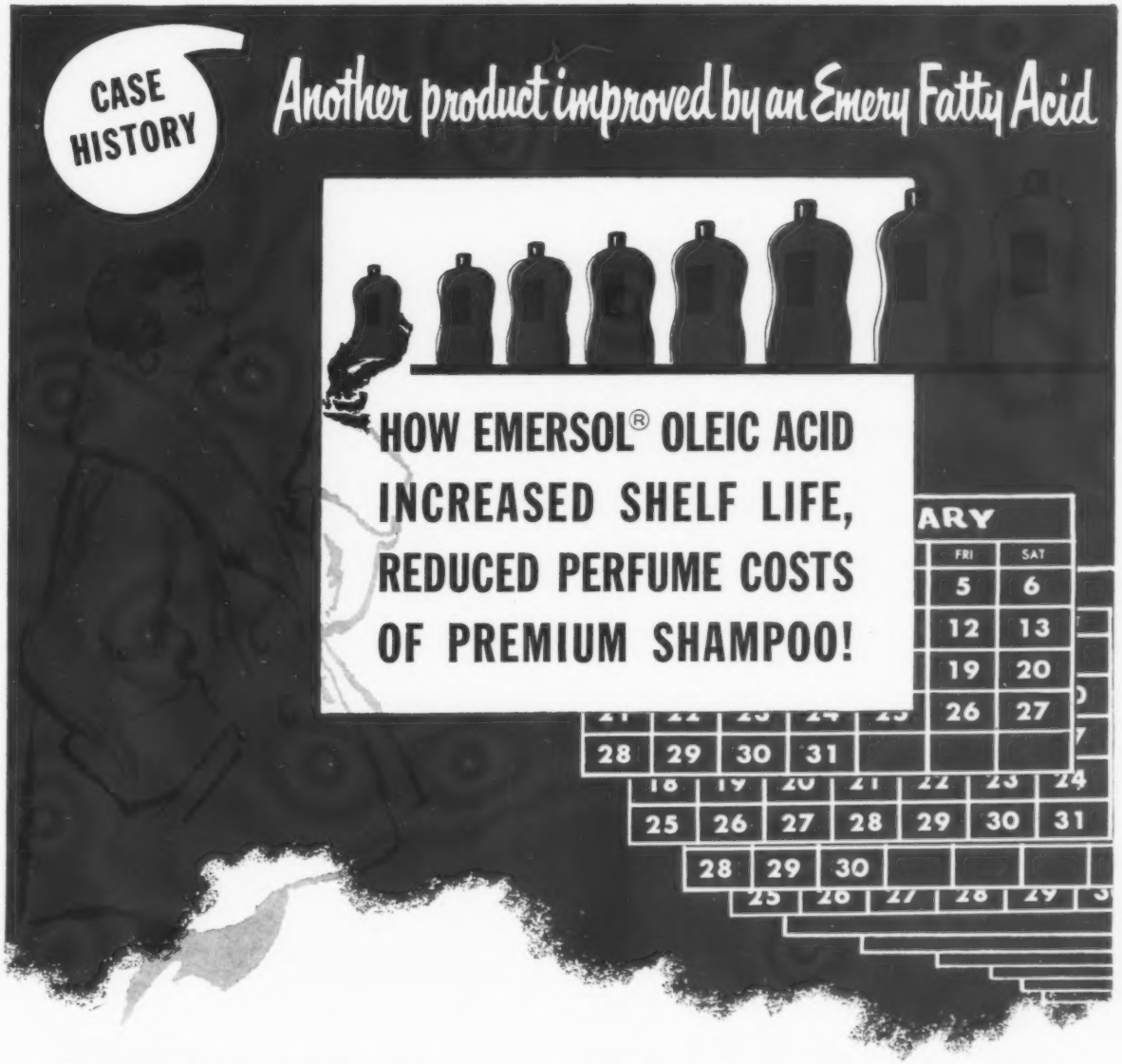
CASE HISTORY

Another product improved by an Emery Fatty Acid



HOW EMERSOL® OLEIC ACID INCREASED SHELF LIFE, REDUCED PERFUME COSTS OF PREMIUM SHAMPOO!

THE PROBLEM of increased shelf-life for this manufacturer's premium shampoo was quickly solved when Emersol 233 LL Elaine was substituted for an ordinary double-distilled oleic acid. After a prolonged aging test, the shampoo containing Emersol 233 had the same light color, pleasant odor, viscosity, clarity, and sudsing characteristics as the day it was made. Furthermore, perfume costs were reduced since there were no longer rancid odors that required masking.

To You Who Don't Make Shampoo—

Even though your product may not be related to shampoos or soaps, the outstanding *color stability*, *oxidation stability* and *resistance to rancidity* of Emersol 233 can make your product better, stay better longer.

These advantageous stability characteristics are also inherent in Emersols 220 and 221 White Elaines, however, to a lesser degree, but, still far superior to competitive double-distilled oleic acids.

The greater consumer appeal that these Emersol multiple-distilled oleic acids impart to your product will make them readily accepted . . . easier to sell. And since they cost no more than competitive grades, it will *always* pay you to buy Emersol multiple-distilled oleic acids.

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...about chemical specialties

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THIS 514-page text covers the formulation, manufacture, and use of polishes, cleansers, detergents, floor-care, leather-care, and textile products, industrial, household, and many other allied chemical specialties. Each of the 42 chapters deals with a different specialty and includes formulas and manufacturing methods for that specialty. The manufacturer, marketer, chemist and production man will find this book of great value.

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A practical book on formulation, properties, testing, history and effective use . . . full coverage of labeling (with specimen), laws, regulations, etc. . . . for every executive, salesman, plant man and chemist . . . in plain understandable language . . .an entirely new book!

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In Hard-Surface Cleaners, too,
THE KEY IS CMC

In hard-surface cleaners as well as in soaps and detergents, Hercules® CMC means you get dirt out—never rub it in. The unusual soil-suspending properties of CMC prevent the redeposition of dirt, give a cleaning agent the ability to do its job quicker and better.

"Solventol," for example, called a new concept in cleaning by its manufacturer, takes full advantage of the properties of CMC. Recommended for floors, walls, woodwork, tubs, upholstery, rugs, and "all around the house," "Solventol" cleans without scrubbing, rinsing or wiping.

More and more manufacturers of cleaning agents, as well as commercial laundries, are discovering the value of economical CMC. Prove for yourself what CMC can do for you. Write for technical information and a testing sample.

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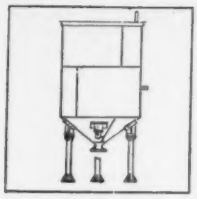
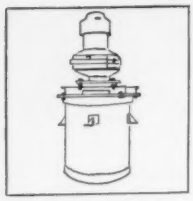
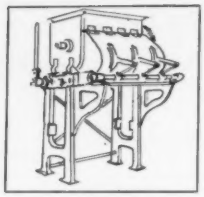
Manufactured by Solventol Chemical Products, Inc., "Solventol" is a new hard-surface cleaner which capitalizes on the soil-suspending advantages of Hercules CMC.



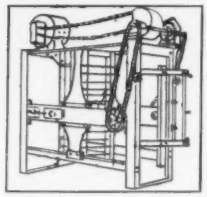
KETTLES



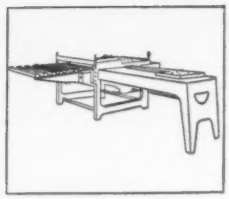
CRUTCHERS



AMALGAMATORS

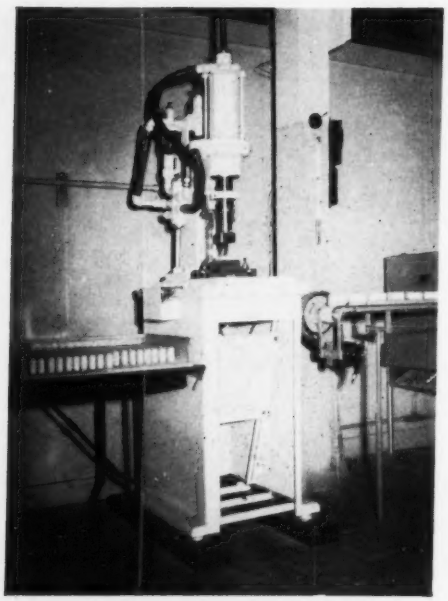


SLABBERS



LAUNDRY SOAP CUTTERS

No Operator Injuries Reported in Five Years by Users of the



HOUCHIN SAFETY AIR PRESS

Houchin is exclusive manufacturer in United States under U. S. A. Patent License.

Although there are a great many of these safety air presses in use today not a single accident to an operator has been reported in the five years these presses have been on the market.

The air ram remains locked at all times, until the operator has moved both hands away from the die box to depress the right and left hand valve release controls *simultaneously*.

PRESSING IS QUICK, POSITIVE AND UNIFORM

Dangerous, old fashioned, tiring foot lever controls are eliminated. The operator remains comfortably seated. The actual pressing and ejection operations, although manually controlled, are completely automatic.

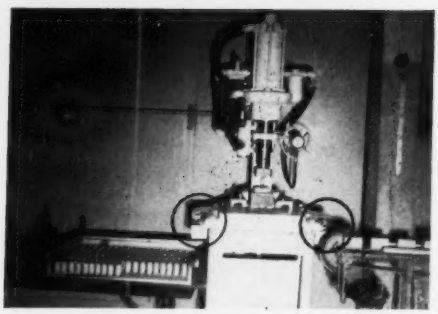
HOURLY AND DAILY PRODUCTION IS GREATER.

Operators soon learn the simple, safe, fast routine of feeding blanks to either Box or Pin Dies.

FATIGUE IS ELIMINATED. Efficiency, speed and safety of production consequently gain.

SURFACE PRESSURES up to 2500 lbs. are attained by a simple thumb and finger valve adjustment. Either single or multiple air ram strokes are made at will by the operator.

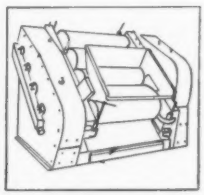
This air controlled press may be used for "cutting die" operations, such as gasket making, swatches or punching.



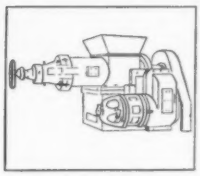
NEW IMPROVED MODEL B

Note safety automatic hand levers on each side of the press, away from the die position. Both hands must be used to depress right and left hand control levers *simultaneously*, in order that the air ram may function.

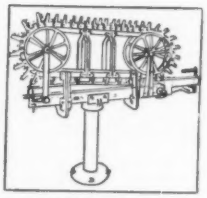
HOUCHIN builds all the kindred machinery needed for completely automatic, continuous or intermittent, soap production.



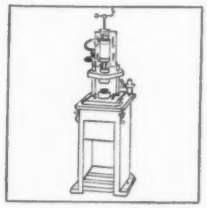
MILLS



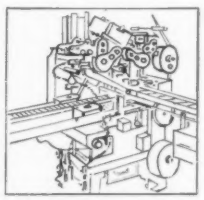
PLODDERS



TOILET SOAP CUTTERS



PRESSES



WRAPPERS

HOUCHIN MACHINERY CO., INC.

HAWTHORNE, NEW JERSEY, U. S. A.

Manufacturers of Soap Making Machinery for Over a Century

Bar Form Detergents

Although the ideal bar form synthetic detergent has yet to be developed, the sulfated fatty acid alkylolamides show promise as most soap-like of anionics

CONSIDERABLE progress in the making of bar form detergents has resulted from war time research, but none of the European products proved entirely acceptable for toilet use when the emergency ended. However, certain specialized functions could undoubtedly be fulfilled by detergent bars where ordinary soap is not 100 percent effective. In hard water areas their use would be more economical and would eliminate lime soap deposits. Detergent bars could be marketed at a neutral or even slightly acid pH and would thus be helpful in the treatment of certain skin conditions or in cases of hypersensitivity towards alkalies. The use of detergent bars as carriers for antiseptics which are inactivated by soap could make them suitable as sanitizing cleansers in clinics. Detergent bars are useful in industry where the removal of oil and tar from the skin of operatives frequently presents a serious problem. Wherever a market for salt water soap exists, detergent bars could do a superior job. Finally there is the interesting possibility of using detergent bars for shampoo purposes, where they may well prove to have a special appeal to men.

The chief difficulties in the manufacture of a soapless detergent bar are essentially these: 1. Anionic soapless detergents of the sulfonated or sulfated type (the only practical choice, owing to their superior lathering properties) are too readily soluble in water and tend to disintegrate too rapidly. 2. The cost of 100 percent active detergent matter is substantially higher than the cost of soap. It would therefore be difficult to market a pure detergent tablet on a competitive basis.

To manufacture detergent bars with a limited detergent content only, a suitable filler and/or binder must be found. Such a material must be compatible with the active detergent and not inhibit its lathering properties. It should reduce or control the solubility of the detergent so as to make the bar economical in use. Further it must be cheap or at least economical enough to act as an extender. The material should be of such physical form as to enable the composition to be readily processed, preferably in the conventional soapmaking type of plant. In addition, the material must be mild in its action on the skin and impart to the composition a soap-like "feel." Finally, its specific gravity should be comparable to soap.

Secondary alkyl sulfate type detergents, used for detergent bars during the war, are too truly electrolytic to make them ideally suited to this purpose. In addition, they were marketed at that time with a percentage of Glauber salts, even in their liquid form. This led to the development of unsightly crystallization and a whitening on the surfaces of the bars, either in storage or in use. Detergents which form the basis of bars must be either entirely desalted or they should introduce at most a trace amount of less than 0.5 percent into the composition.

Only three soapless detergent bars achieved commercial significance in England after the last war: "Novosope," "Soam," and "Ajama." The first two products were based on alkyl sulfates (and/or alkyl aryl sulfonates at a later date) plus mineral fillers, the third appeared to be a partially sulfonated fatty material. The first two types were of rather high specific gravity but lathered relatively freely. The third bar form detergent was closer to soap in appearance and gravity but did not give much lather. Both "Novosope" and the "Soam" line of products were based on their own respective binders. The "Soam" products, according to available information, were manufactured on standard soapmaking equipment and were triple-milled, plodded, and hand-stamped. No other type of synthetic bar with a filler content of about 70 percent achieved such a high degree of soap-technological refinement, according to the author.

While these soapless detergent bars appeared on the market in Great Britain, a rather more advanced type of detergent bar was brought out in Switzerland (Swiss patent No. 186960). This was based

Deodorants with G-11®

(Brand of Hexachlorophene)

remove the cause of body odor

Soaps, detergents, creams, colognes, sticks and lotions containing G-11 are making dramatic sales increases because they combat the fundamental cause of body odor.

Body odor, particularly underarm odor, is caused by the action of skin bacteria on perspiration. Research has shown fresh perspiration to be odorless until it is contaminated with skin bacteria. G-11 combats these bacteria and thus removes the basic cause of the odor.

G-11 remains on the skin, even from soaps which are thoroughly rinsed off with water. Thus the deodorant action persists for days. Persons who have used deodorants with G-11 for three and four years show no immunity to their action.

Over seventy scientific articles, mostly by independent researchers, have been published over the last ten years attesting to the antibacterial and deodorant performance of G-11.

In addition, G-11 is not perceptible while on the skin, has no harmful effect on clothing, is compatible with perfumes, is readily soluble in soaps and cosmetic formulations, and is non-staining and non-irritating.

Write now for technical bulletins and formulas for G-11.

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on primary sulfated fatty alcohols, dextrinized starches, gum tragacanth, and a relatively low percentage of mineral fillers. These bars were comparatively expensive but attractive, somewhat lighter than their British counterparts, and used a low pH value as an important point in their promotion.

The ideal detergent raw material which would compare in price on a 100 percent basis with soap and could be worked in the conventional type of plant is still being sought. The recent drop in prices of a number of oils and fats suggests possibilities for detergents which can be synthesized by direct reaction with suitable oils or fats. The sulfated fatty acid alkylolamides, preferably of a fatty acid chain length of predominantly C_{12}/C_{14}, come to mind in this connection. These detergents are not easy to manufacture but, at their best, yield excellent detergents, which of all the anionic detergents are the most soap-like in behavior and appearance.

Sulfated glyceryl dilaurate has been found a suitable base for soapless detergents in the United States (U. S. patent 2,385,614). This compound is said to combine soap-like plasticity with a lubricating effect which enables it to be processed in the same manner as soap. It is formulated without use of fillers and binders.

Alkyl aryl sulfonates have been widely used in the United States as a base for detergent bars. Potentially low cost and excellent lathering properties make them seem attractive. However they are not regarded as ideal for the purpose except in a highly purified form and only as an addition in limited quantities. Alkyl aryl sulfonates are sticky and hygroscopic, yet lack the plasticity required for satisfactory milling and plodding. Furthermore, they are highly substantive to the skin and tend to leave an unpleasant "tacky" feel after use. Lecithin has been found to reduce this effect (Keenan, U. S. patent 2,617,772). The author himself has come across fatty acid condensation products which seem to exert a similar effect either by virtue of complex formation or possibly by preferential adsorption. Nevertheless, the use of alkyl aryl sulfonates would probably always entail the use of substantial percentages of fillers, special binders to reduce the tendency to become mushy in use, and very ingenious formulation to achieve milling, plodding, and stamping consistency.

Apart from the price aspect, 100 percent bars would be too concentrated for most practical purposes. Consequently, the search for the ideal extender or binder continues. Mineral waxes are ruled out by foam reducing properties. "Carbowaxes" were expected to provide the answer but have proved somewhat of a disappointment in use. They do not provide sufficient slush resistance with most detergents and their cost is generally too high for them to be considered as price reducing ingredients. Soap itself is a binder and extender for soapless detergents. Though admittedly a compromise solution, it yields attractive and effective products. The detergent must be chosen correctly since there exist considerable variations in the degree of soap compatibility. Fatty acid alkylolamides are highly compatible with detergents and show promise as additives to soapless detergents. While it is unlikely that any one of these non-ionic compounds would be suitable for every type of soapless detergent, the experimenter would find that one or the other member of this group would confer upon his preferred detergent the essential properties of plasticity, binding effect, mush resistance, and the colloidal effects generally associated with soap.

Since soapless detergent bars must, at least for the moment, sell at a price substantially above that of mass soap bars their odor appeal is of great importance. Most soapless detergents possess a distinct odor of their own which comes through most blended soap perfumes. Covering agents may be quite suitable for washing powders where their main function consists in imparting a pleasant odor to the dry powder. In washing the skin, however, residual odors remain, due to traces of adsorbed detergents. Special perfumes must therefore be blended around the odor of any particular detergent, a task calling for ingenuity on the part of the skilled compounding perfumer.

Has the independent soapmaker learned the lesson of the phenomenal success of detergent washing powders and is he devoting some of his resources towards research in the still wide open field of soapless detergent bars? W. B. Reinisch in *Soap, Perfumery, & Cosmetics*, April 1954, page 385.

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Midwest Oil Chemists Group

Formation of the North Central Oil Chemists' Society was announced recently. A local Chicago group of technical people in the field of vegetable and animal fat products, the organization is patterned after the Northeast Oil Chemists' Society in New York and may eventually apply to the American Oil Chemists' Society for admission as its Midwest Section. Officers elected for the year 1954-55 include: K. F. Mattil, Swift & Co., president; J. P. Harris, J. P. Harris, Inc., vice-president; N. W. Zieis, Lever Brothers Co., secretary; R. A. Reiners, Corn Products Co., treasurer. Members-at-large are: A. W. Haskell, Southern Cotton Oil Co.; A. A. Kiess, Armour & Co.; and A. A. Rodeghier, Durkee Famous Foods.

The organization plans a program of four to six meetings, beginning next month.

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"Lustre-Creme" Campaign

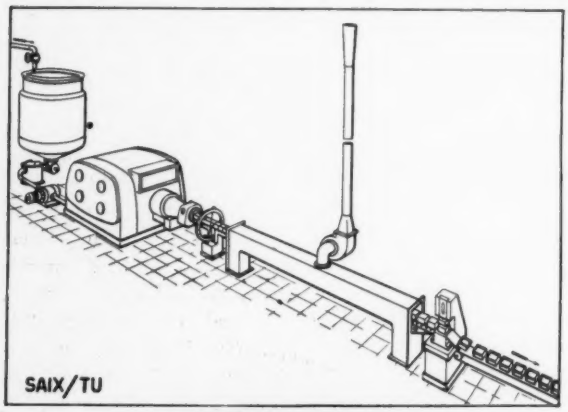
Colgate-Palmolive Co., Jersey City, N. J., will repeat last year's "thrift offer" campaign for "Lustre-Creme" shampoo over a period of three months, it was annouced recently. The "thrift offer" of a giant $2 jar for $1.59 will be supported by counter displays at point of sale featuring photographs of motion picture stars and by advertising.

MECCANICHE MODERNE

CORSO SEMPIONE, 51 **(Italy) BUSTO ARSIZIO**

PATENTED Cooling Extruder Type SAIX for the continuous chilling and finishing of every kind of laundry soap, with 62%, 52% as well as with a T.F.M. content as low as 35%, either from full boiled kettle soap or from soap pads by a continuous process.

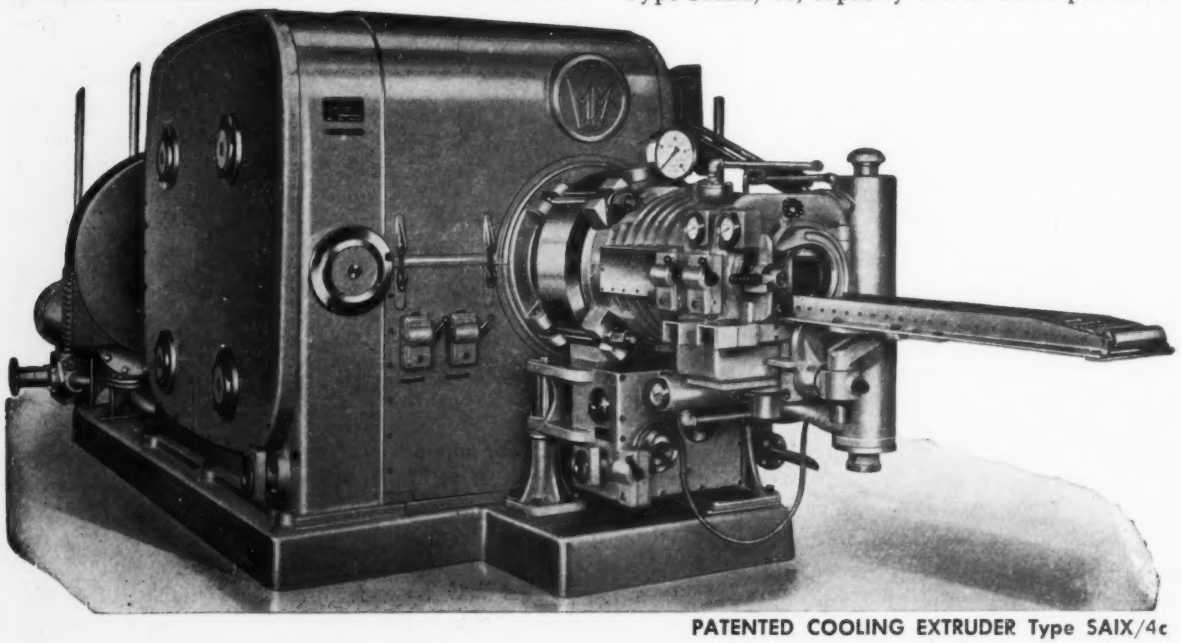
From the saponification (molten hot soap) to the finished bars (cold solid soap) in a single stage without any interruption or structural change. In this plant, completed by a preliminary evaporator of the molten hot soap, it is possible to manufacture 72-73% T.F.M., soaps with an opaque, translucent or transparent appearance. The soap is continuously formed in bars of every desired size or in pellets for further milling procedure.



SAIX/TU

In this plant it also is possible to manufacture conventional or transparent toilet soaps without any formation of hard spots.

Type SAIX/1c, capacity HALF TON per hour.
Type SAIX/2c, capacity ONE TON per hour.
Type SAIX/4c, capacity TWO TON per hour.



PATENTED COOLING EXTRUDER Type SAIX/4c

Test Detergents for Vegetable Washing

FIFTEEN detergents were tested recently at the Florida Agricultural Experiment Station, Gainesville, Fla., to determine their ability to remove toxaphene from vegetable surfaces treated with this insecticide. Only four were sufficiently effective to warrant use, a station report states. These are referred to as "D," an alkyl-aryl polyether; "E," a neutral soap; "F," ethers of an alkyl-aryl polyglycol; and "G," a blend of alkyl-aryl sulfonate and polyoxyethylene esters. These four, respectively removed, 26, 24, 19 and 18 percent more toxaphene from the surfaces than the water check.

Celery, treated with three pounds of active toxaphene (emulsion) per acre, was harvested after the fourth weekly application and again two weeks later. Loss of weight during storage was the only apparent effect of the detergents on quality of the celery, this varying from 4.6 percent on the check to 6.5 percent with treatment "F."

Water removed more than 50 percent of the initial residue of 60 ppm. toxaphene found two hours after spraying, while detergents "D," "E," and "F" removed 72, 73 and 69 percent, respectively. Residue two weeks after spraying was about 15 ppm. Water had removed none and the three detergents had not reduced the residue to less than 10 ppm.

Green beans treated with toxaphene and parathion showed, after six days' storage, weight losses varying from 17 percent on the check to 22 percent with treatment "D," and resulted also in wilted, generally tough beans. Detergents "D" and "G" also caused some injury in the form of discolored, sunken spots after four or six days' storage. Parathion residues were from a trace to 2.0 ppm, and all washing treatments indicated 10 to 30 percent less residue after treatment.

Tomatoes received five applications of toxaphene and parathion. Mature green fruit was washed after harvest and, after six days storage at 70° F., weight losses from all treatments were from 2.5 to 3.0 percent. No other apparent effect of the detergents was noted on fruit quality.

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Novel Tank Heating

Thermo-Panel Division, Dean Products, Inc., 616 Franklin Ave., Brooklyn, N. Y., recently announced a novel application of their product. Instead of pipe coils within the tank, Thermo-Panels have been structurally built into the walls of this tank. This was found to be a better method for heating the tanks, as well as easier for cleaning out the tank. It is excellent for keeping chemical solutions, oil tanks, and storage tanks warm and making it easier for the material to flow.

Thermo-Panels are also used for the heating or cooling of liquids, slurries, soaps, waxes, acids, alkalis, electrolytes, powders and mixtures. Available in flat plates and in special shapes such as "U" 's, and cylinders, and a wide range of materials, including steel, stainless steel, Monel and other special alloys.

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New Industrial Odorant

A new liquid compound for control of unpleasant odors emanating from hotel garbage dumps, trash cans and sewage systems was announced recently by Stewart-Hall Chemical Corp., 550 S. Fulton Ave., Mount Vernon, N. Y. Designated "Sanifil," the new compound is a concentrated liquid, one-half gallon of which can be made up into a solution with 50 gallons of water. It may be applied by spraying or by sprinkling over garbage and other waste. Because of its claimed low vapor blanket ef-

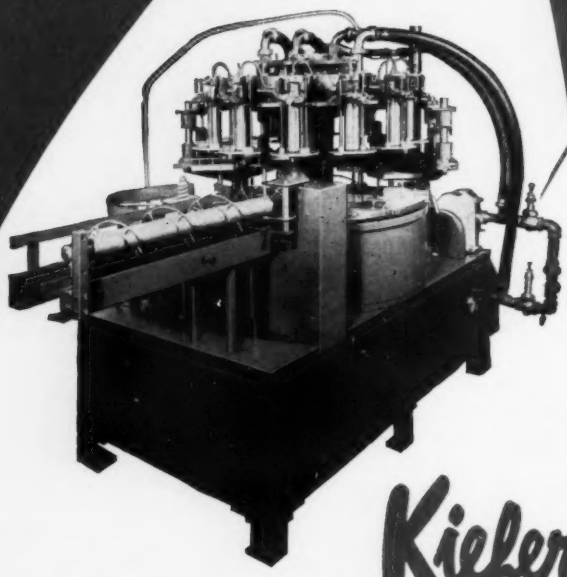
(*Turn to Page* 113)

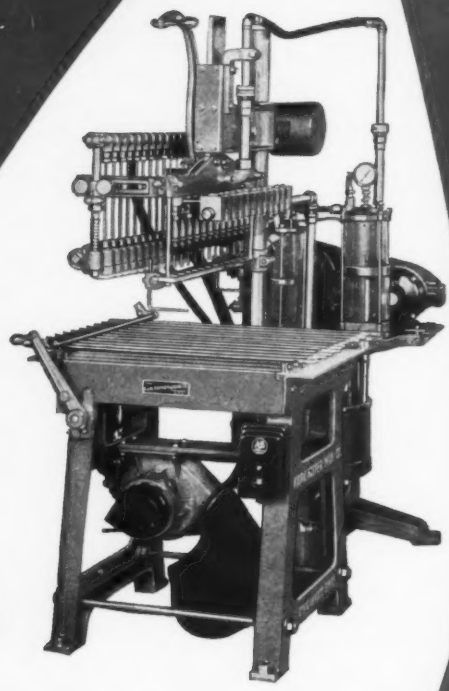
Thermo tank heating panel (inset) on exterior underside of tank.

TIRELESS SERVANTS . . .

— faultless performance

They fill, fill, fill . . . quickly, efficiently . . . economically





Kiefer

VARI-VISCO CAN FILLING MACHINE

Handles rectangular or round cans, also glass containers up to gallon. Fills from bottom up to provide solid pack of heavy materials and to avoid splash with liquids.

For such products as GREASE, OIL, WAX, PAINT.

COMBINATION TL CLEANING & FILLING MACHINE

Talk about speed . . talk about thorough 4-season cleaning and precise filling! A row of bottles is cleaned while another row is being filled, without extra labor cost. Quickly adjusted for wide variety of bottles or spout top cans.

For—LIGHT . . HEAVY . . FOAMY LIQUIDS.

The Karl Kiefer Machine Co.

CINCINNATI, OHIO, U. S. A.

NEW YORK • BOSTON • CHICAGO • PHILADELPHIA • SAN FRANCISCO
HOUSTON • SAVANNAH • LOS ANGELES • LONDON, ENGLAND

New Carton Sealer

Container Equipment Corp., Bloomfield, N. J., recently announced a new carton glue sealing machine. Designated Model 3901B, it was originally developed for the Scott Paper Co. Many new production features enable the machine to provide as much as a 100% increase in production over previous models.

The most advanced feature of the new model consists of the vertical glue wheels which apply glue in any desired pattern to any or all flaps of the carton. The uniform application of glue assures a neater, cleaner seal. In addition, maintenance and clean-up are speeded by the ease of removal of glue rollers and scrapers.

Like other CECO cartoners' and glue sealing machines, the semi-automatic Model 3901B requires only a simple adjustment to handle cartons in a wide range of different sizes and shapes. Changeover may be made by any unskilled operator in less than three minutes. The machine will handle gluing of the economical "meeting outer flaps" type of carton, as well as full overlapping and partial overlapping outer flaps, in all cases assuring a positive inner seal. Variable speed controls adjust the machine to production requirements.

The new vertical gluing method is also available on the CECO Models 40 and 45 cartons. Glue sealers and cartoners are all complete self-contained units, mounted on casters for easy portability.

Full details and brochure on Model 3901B glue sealer as well as the cartoners are available from Container Equipment Corp., 78 Locust Avenue, Bloomfield 2, N. J.

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Bulletin on Anti-Caking

The use of "Petro AA" a surfactant in 98 percent pure powder form or as a 50 percent liquid to overcome caking or hardening of chemical compounds is described in a bulletin issued recently by Petrochemicals Co., 1825 E. Spring St., Long Beach 6, Calif. Properties of the two forms of "Petro AA," and methods of application to prevent caking of dry mixes or straight chemicals or salts are described in the bulletin, which is also available on request at the eastern sales office, 420 Lexington Ave., New York 17, N. Y.

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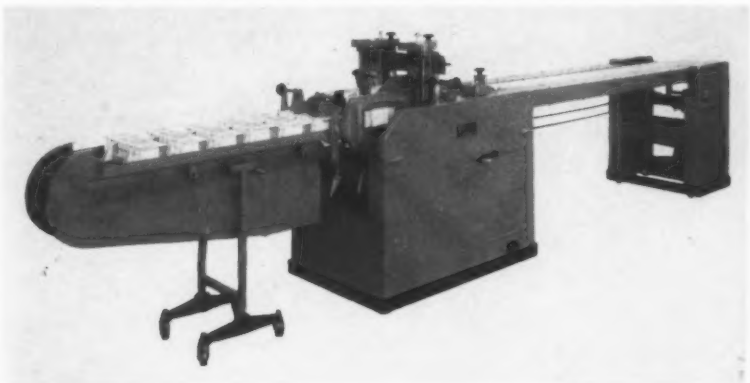
Odorless Solvent Folder

A folder on its new petroleum hydrocarbon type solvent for use in a wide variety of chemical specialties including insecticides, deodorants, floor oils, waxes, cleaners, dust applicators and polishes, was announced recently by Chemical Solvents Co. of Baton Rouge, La. According to the folder, the solvent is stainless and odorless. Chemical and physical properties of the new solvent, which is available as "BR-120" and "BR-160," as well as its applications are covered in the folder which may be obtained by writing to the company at 2500 Summit St., Kansas City 8, Mo.

New carton glue sealing machine of Standard Equipment Co.



New Wax Booklet

A new 28 page booklet describing the background of candelilla wax is now available. The booklet, printed in color and illustrated with pictures and diagrams, discusses the production of the refined wax, lists its chemical properties and describes its uses in the various industries. The booklet is available from Dr. David L. Brophy, 20 Vesey Street, New York City. Further booklets will be isseud on additional uses and latest research regarding candelilla wax.

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Perl Machine Folder

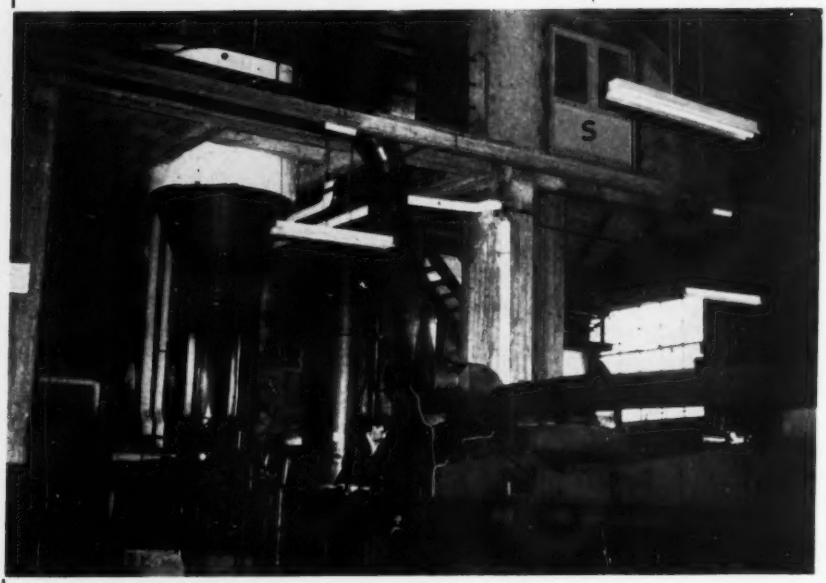
A four-page, 8½ x 11 inches, two color folder, on its line of fully automatic straight line and can filling machines was announced recently by Perl Machine Manufacturing Co., 68 Jay St., Brooklyn 1, N. Y. Illustrated and described in the folder are the Perl Model 100, which fills by gravity, vacuum or pressure. It has a rated capacity output with 10 valves of 60 quart bottles, 80 pint bottles or 100 eight ounce bottles per minute. The machine can also operate with 16 valves.

The Model 105 fully automatic straight line can filler, which requires no operator, can fill cans ranging in size from eight ounces to five gallons. It has an output capacity of 30 one gallon cans per minute with eight valves. More valves may be added. It also features non-slip micrometer for filling height adjustment; automatic shut-off, and dripless valves, which are closed automatically when lifted from containers by bottom shut-off design feature.

An automatic five gallon bottle filling machine, the Perl Model 110, is shown, which has filling speeds of 30 seconds per cycle by gravity, and 20 seconds per cycle by vacuum.

A fully automatic straight line filler for medicine, cosmetic bottles, vials and ampules is shown and described in the new Perl folder. The unit has filling speeds up to 200 containers per minute.

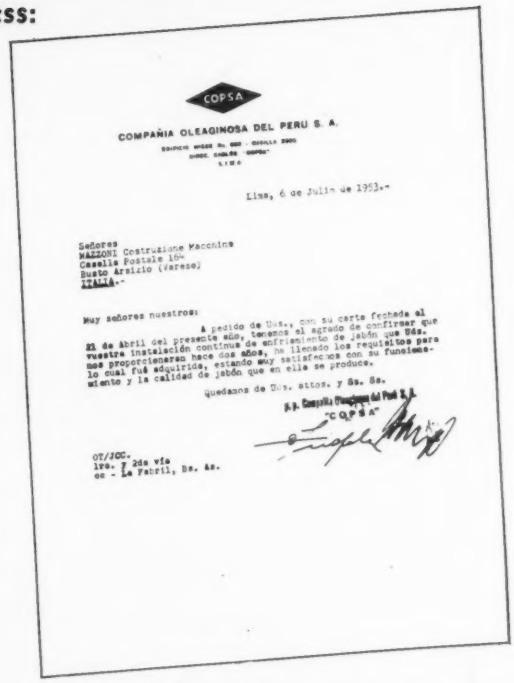
Continuous Soap Plants



Photograph of a MAZZONI soap plant automatically producing one ton of household or toilet soap per hour. "S" is the silo for the storage of the dried soap rods. From the silo the rods are then passed through a line of finishing machinery for milled toilet soap cakes.

Advantages of the MAZZONI Process:

- ★ Small plant space; only one operator needed.
- ★ Saves 70% in steam, 50% labor, 40% electric power.
- ★ Operates at low temperature, avoiding deterioration of soap.
- ★ Vacuum process gives better toilet soaps. Deodorizing effect reduces perfume needs. Smoother, grit-free cakes which wash off evenly. Improved lathering. Automatic perfuming device included.
- ★ Complete installations (mixers, mills, plodders, cutters and stampers) for milled toilet soap and soap flakes.
- ★ Since 1945 more than 70 plants have been installed in different countries of the world.
- ★ Laundry soaps, pure or filled, ready for pressing and immediate packing without slabbing, cutting, etc.
- ★ Suitable for adaptation in any soap factory, — a compact, low-cost vacuum process, continuous from neat soap to pressing and wrapping.
- ★ Plants for outputs of half-ton, one ton, two tons, three tons or higher per hour.



COPSA

COMPAÑIA OLEAGINOSA DEL PERU S. A.

Lima, 6 de Julio de 1953.-

Señores
MAZZONI Costruzione Macchine
Casella Postale 16
Busto Arsizio (Varese)
ITALIA.-

Muy señores nuestros:

A pedido de Uds., con su carta fechada el 21 de Abril del presente año, tenemos el agrado de confirmar que vuestra instalación continua de enfriamiento de jabón que Uds. nos proporcionaron hace dos años, ha llenado los requisitos para lo cual fué adquirida, estando muy satisfechos con su funcionamiento y la calidad de jabón que en ella se produce.

Quedamos de Uds. attos. y Ss. Ss.

p.p. Compañia Oleaginosa del Perú S.A.
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cc - La Fabril, Bs. As.

For further detailed information, write to

G. MAZZONI, S. p. A.

Busto Arsizio, (Varese) Italy

Cable address: Cosmazzoni, Busto Arsizio

PRODUCTION Clinic

By E. G. Thomssen, Ph.D.

CONTINUING the discussion begun last month on materials handling and some of the problems which arise in connection with it, we will consider in more detail various types of conveyors; the use of truck type equipment and the conveying of raw materials, particularly powders and liquids in bulk.

The selection of the most suitable type of conveyor for handling large and/or small quantities of materials to be packed in cartons, bottles, cans, drums or other shipping containers is usually based on the needs and facilities of a particular plant. The size of the plant, its location, and the types of materials to be processed and packaged, as well as their quantities, must be considered in choosing a particular conveyor or conveying system.

Conveyors vary as to types, sizes and capacities. The most commonly used is the belt conveyor. Belt conveyors themselves are available in a wide variety of styles and sizes. They come in different widths and capacities, and the angles at which they may be positioned in operation vary. The fabrics used for the belting may differ for individual applications. In recent years beltings have been considerably improved so that materials conveyed on them do not slip even when moving steeply up or down. For certain types of conveying operations corrosion resistant chains are employed. Belt conveyors generally require less upkeep than other types, are clean, economical on power and may be run at variable speeds.

Other types of conveyors include apron, pan or slat units, drag, roller and pneumatic air variations. Each of these has advantages for specific work, but none is used as extensively as the belt conveyor.

Our discussion of materials handling to this point has mainly covered the handling of raw materals and finished packages by conveyors. However, it is not always advantageous or economical to depend solely on conveyors. They have certain limitations that may be offset or eliminated by employing hand trucks, lift trucks and elevating fork trucks and pallets. The chief advantage of the trucks over conveyors is their greater flexibility. By using hand, lift or fork trucks it is possible to move goods to any desired point in the most convenient single quantity. Self-powered elevating fork trucks are particularly popular. They may be devised to handle pallets, bundles, cases or barrels. In addition they can stack items readily, and are built to carry heavy loads. Steel or wooden storage racks may be installed to facilitate higher and more stable stocks.

A common objection to the use of trucks is that they require wide aisles in order to maneuver. Recently truck makers, particularly those producing fork model trucks, have developed units that can operate in narrower aisles. Right angle pallet loads, up to 12 feet in height, may now be transferred in passages six feet wide.

Dr. Thomssen

Since bulk shipments of raw materials, whether in dry powder or liquid form, afford considerable economies in handling and freight charges, most raw materials are not shipped to processing plants in packages. Bulk shipments, while more economical than numerous small unit shipments, present problems in handling once they arrive at a plant. This must be borne in mind when selecting conveyors or deciding on a particular materials handling system.

The plant storage and intraplant transfer of powders for further processing presents more of a problem than liquids. Equipment available for bulk handling of raw materials includes bucket, spiral and scraper conveyors; vibrating conveyors; pneumatic air conveyors and the Tote System. In selecting a powder conveyor the following factors should be considered: the form of the powder, whether it is fine, granular or coarse; its weight; tendency to pack, etc. While each installation will present its own individual set of requirements, some types of conveyors are more flexible than others and are less costly to install.

Bucket, spiral and scraper conveyors all operate in a wooden or metal housing. They are used quite commonly in smaller plants. An interesting variation of this class is the so-called "Zipper" conveyor. Extremely versatile, it readily transfers and elevates powders between zipper-like teeth. This conveyor is easy to clean.

Vibrator conveyors which are actuated magnetically are useful for handling hot, friable and certain highly toxic powders or granules without dust, loss or deterioration.

Pneumatic air conveyors operate under air pressure or vacuum. A common example is the cash carrier installed in many department stores. Pneumatic air systems

SHEA Announces New Sodium Phosphate Plant at Jeffersonville, Indiana

Shea . . . fastest growing producer of phosphates . . . proudly presents its newest plant at Jeffersonville, Indiana.

Here, central to vital consuming locations, Shea offers prompt delivery of the highest quality Sodium and Calcium Phosphates and all grades of Phosphoric Acids for:

soap and detergents . . . foods and food processing . . . metal cleaning . . . paint manufacturing . . . paper-making . . . mining . . . cement production . . . and many other industrial applications.

To be currently informed . . . know Shea quality and Shea service! Get the facts—by mail, phone or wire!

SHEA CHEMICAL CORPORATION

Phosphorus And Its Derivatives

Executive Offices: 1201 St. Paul St., Baltimore 2, Md.
Plants at Columbia, Tenn.—Adams, Mass.—Jeffersonville, Ind.

Elemental Phosphorus
Ferrophosphorus
Phosphatic Fertilizer Compounds
Feed Grade Dicalcium Phosphate
Calcium Phosphates

Phosphoric Acids:
NF, Food & Technical Grades
Phosphatic Fertilizer Solutions
Organic Phosphates
Phosphate Intermediates

Sodium Tripolyphosphates
Monosodium Phosphate, Anhydrous
Disodium Phosphate, Anhydrous
Tetrasodium Pyrophosphate
Sodium Hexametaphosphate

are used in many ways for unloading freight cars, trucks, or bins for bag fillers, and especially for transferring powders to mixers or filling machines. Among the advantages claimed for them are space saving, flexibility, ease of operation, economy, low installation cost and ease in cleaning. The pneumatic suction type system operates through a self-feeding, flexible hose connected to a vacuum pump and specially constructed discharge valve. The pressure system operates through a hopper, a feeder and an air-locked force feed that may be regulated very easily. The pressure system is particularly useful when powdered materials are to be distributed to several locations over long distances.

The Tote System utilizes steel or aluminum bins of various cubic capacities and holding from 500 to 6,000 pounds of materials, depending on their densities. Additional Tote equipment includes the automatic filler and discharge equipment. The Tote System is used for intraplant transfer as well as for movement of bulk materials in intraplant operations or from producer to processor. The bins are simply filled, trucked and discharged. This system is claimed to speed up operations and at reduced costs. Another advantage claimed for the Tote System is that in many cases it eliminates the need for storage bins, since the carrying bins can double as storage units.

In selecting a conveying system for handling powders consideration should be given to: dust control, bin storage space, fire hazards, bin level gauges and prevention of contamination.

The conveying of liquids is comparatively simple. The more common methods are by gravity, pumps, siphons and a closed system. These are so familiar that it is not necessary to elaborate on them. In systems for handling liquids the right piping for a particular fluid, correct meters and heaters for use if liquids congeal and ade-

quate filling equipment are of importance. In certain liquid handling operations where drum size packages are filled in volume, it is much more economical in time and labor to store the liquids in bulk tanks and fill them rapidly by weight on accurate scales equipped with automatic tare determination and cut-offs. Such a system eliminates duplication in package handling.

Materials handling is a subject that requires very careful study in today's economy. Although management in some smaller companies may overlook its importance, the lower production costs and higher profits required in today's competitive economy are open to those who install modern new efficient systems or modernize older ones.

Notes on Equipment

TO round out our discussion of materials handling equipment, we are appending a list of the changes made in recent months by some producers of materials handling equipment.

Evans Products Co., Plymouth, Mich., has improved its D.F. Loader for reducing dunnage and damage costs in loading freight cars. Faster loading and unloading is claimed to be possible through the use of these bars.

Revolvator Co., North Bergen, N.J., has a "Go-Getter" lift truck for warehousing operations. The unit is said to make possible economies and efficiencies through improved handling of 2,000 to 3,000 pound loads in narrow aisles.

Gerlinger Carrier Co., Dallas, Oreg., is building a series of fork lift trucks that can be operated at high speeds with loads as great as eight tons and hoisting heights of up to 16 feet two inches. These trucks come with long and short wheelbases.

Clark Equipment Co. Battle Creek 42, Mich., is now offering its line of materials handling equipment on a pay-as-you-go lease plan. Clark's gasoline or electric fork trucks, powered hand trucks, tractors and carriers are available under a three to five year lease plan.

Raymond Corp., Greene, N. Y., recently announced a new model, narrow aisle, electric fork truck for warehousing operations. The new unit is a modified straddle truck with four base legs. Five by two inch load wheels straddle the pallet, while seven inch wide elevating forks lower over another set of base legs with dual five and two inch wheels. This arrangement is claimed to provide for maximum stability at elevated heights of up to 158 inches. It is also said to insure against excessive wheel and floor wear. The Raymond truck has excellent turning characteristics and can right angle stack pallet loads from aisles six feet wide, thus reducing waste storage space to a minimum.

Bin-Dicator Co., Detroit 15, Mich., is building diaphragm operated switches for controlling operations on bulk powdered materials that are stored in all types of bins. The switches come in various sizes and automatically control signal lights, horns, belts, conveyors and feeding machinery.

Blockson Catalog

WE have recently received from from Blockson Chemical Co., Joliet, Ill., a copy of the fifth edition of their new, completely revised catalog, "Blockson Chemicals." This book is one that should be found in the library of all chemical specialties manufacturers. Not only does it contain valuable basic information regarding Blockson's line of phosphates, fluorides and wetting agents, but additional useful technical information appears in the concluding pages. This is arranged so that it is readily available without looking through the literature.

Blockson is to be congratulated for its attractive, complete, helpful and enlarged catalog.

New Carbon Remover

A new cold dip, non corrosive carbon removing solution for use with gasoline and diesel engines was announced recently by Lester Laboratories, Ltd., Atlanta, Ga. "Karbon King" is said to be free of the objectionable odor and toxicity hazards of the previously known carbon removers which were based on cresylic acid. In addition it is claimed to far exceed the older type product in speed and efficiency of action. Application for a patent has been filed by the co-inventors, Lester A. Friedman, Jr., and Dr. Fred W. J. Liu.

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Cadie at Premium Show

Cadie Products, New York, introduced two new items in their line of polishing and pressing cloths at the National Premium Buyers Exposition, held in Chicago, recently. The newcomers, as announced by A. J. Meyers, president, are a dog cleaning cloth with chlorophyll, in a plastic pouch, and a double duty cleaning and preserving cloth with silicone for golf club maintenance. Packaged also in an individual pouch, this is convenient for fitting into a golf bag pocket.

Also shown was a representative selection from the Cadie line of cloths for every cleaning purpose. A display merchandiser holding 36 packages of six different Cadie cloths is available for dealers, Mr. Meyers said and he also explained the private label packaging service for distributors.

Cadie Products was founded at Malden, Mass., 100 years ago, in 1854, Mr. Meyers recalled, and has been under the original family's control since then. His son, Edwin W. Meyers, now vice president, represents the fifth generation, he stated.

Sponsor of the premium exposition was the Premium Advertising Association of America. Among speakers on the convention program was Wm. J. Tormey, vice president and director of sales and advertising for White King Soap Co., Los Angeles, Calif., whose topic was "Premiums—A Competitive Sales Weapon."

Maintain odor appeal

at prices within soapmakers' limitations

Pine 78

Gardenia 128

Rose 9

Violet

Jasmine 130

. . . with these five

Albert Verley Compositions

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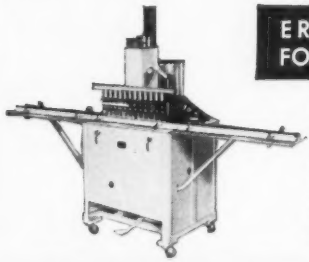

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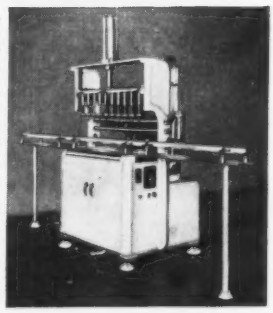

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Hooker Caustic Soda Barge for Chicago

HOOKER Electrochemical Co., Niagara Falls, N. Y., announced Aug. 28, that it has purchased a barge, named "HECo I," for transporting liquid caustic soda in bulk to customers on the inland waterway system in the Chicago area. The announcement was made by Robert E. Wilkin, vice president and general sales manager.

This is the first barge to be bought by a chemical manufacturer for transporting caustic soda in the Chicago area. The barge was put in the Ohio River at Pittsburgh by the Dravo Corp., who fabricated and installed the special equipment. It has just been brought through the inland waterways to Chicago where it will carry caustic soda to customers whom Hooker has been supplying by lighter since last year. The 175-foot barge with a draft of seven feet nine inches was designed for shipping on the Illinois Waterway and Mississippi River Tributaries.

Shipments in the new barge began late last month from Hooker's million gallon storage facilities built last year at Lake River Terminal, 13 miles down the Illinois Waterway from Lake Michigan. Tank car shipments are also made from that point.

The new hopper-type vessel complements the services of two larger 400,000 gallon barges, chartered by Hooker, which since June have been travelling about 150 miles between the company's new $12,000,000 caustic soda-chlorine plant at Montague, Mich., and Lake River Terminal. Previous to June the terminal had been supplied by barge and tank car from Hooker's main plant at Niagara Falls, N. Y.

The new barge has special combing attached at the rails to permit the vessel to proceed into Lake Michigan along the nearby waterfront. It is specially equipped with two large internal horizontal tanks which hold approximately 120,000 gallons, or about 400 tons of 50% caustic soda, dry basis. The tanks are lined with special alkali-resisting material and are equipped with internal nickel heating coils to prevent pickup of impurities enroute. The barge is equipped to deliver any volume with its two diesel-operated pumps, but Hooker plans to make minimum deliveries of 250 tons, dry basis, at a time.

Hooker established bulk causic soda storage facilities at Weehawken, N. J., in 1953 and has since been supplying the Atlantic seaboard regularly by barge from Niagara Falls. Tanker shipments have been made from Hooker's Tacoma, Wash., plant to West Coast points since 1929.

— * —

Rhodinol Process Details

Information on the manufacturing technique involved in the preparation of its new sythetic rhodinol, known as "Rhodinol Shulton," was released recently by Shulton, Inc., Clifton, N. J. The process for making rhodinol, an important rose-type material used in perfume compounding, is disclosed in a patent issued to Stephen P. Joffre and assigned to Shulton, Inc.

The new process involves the isomerization of citronellol to a true rhodinol by exposing liquid citronellol, either at room temperature or at elevated temperature up to its boiling point, to strong ultra-violet light for a sufficient duration so that by simple rectification a high yield of the more valuable rhodinol can be obtained. The process may be practiced with or without the admixture of a metallic catalyst in the citronellol and, preferably, is carried out in an inert atmosphere. The citronellol utilized in this process may be of either natural or synthetic origin.

It was found that rhodinol could be prepared using either a batch or continuous system. In the batch system, citronellol is placed in a quartz container or other material through which ultra-violet light is passed. In the continuous system, citronellol can be circulated through a heated quartz tube or the like through which ultra-violet light is directed. Approximately 80 percent yields of rhodinol can be obtained. The metallic catalysts or promoters which may be utilized in this process may be one or several of the group consisting or mercuric oxide, vanadium pentoxide, etc. The best conditions of time and temperature are a function of the nature or the ultra violet source.

For most purposes where a fine rose aroma has been desired, the rhodinol was obtained by the fractionation of Reunion Geranium Oil, known also as Geranium Bourbon. Geranium Bourbon rhodinol is expensive at approximately $30.00 per pound. For perfuming such materials as soap, compounded rhodinols were prepared as mixtures of several other components to give

(*Turn to Page* 113)

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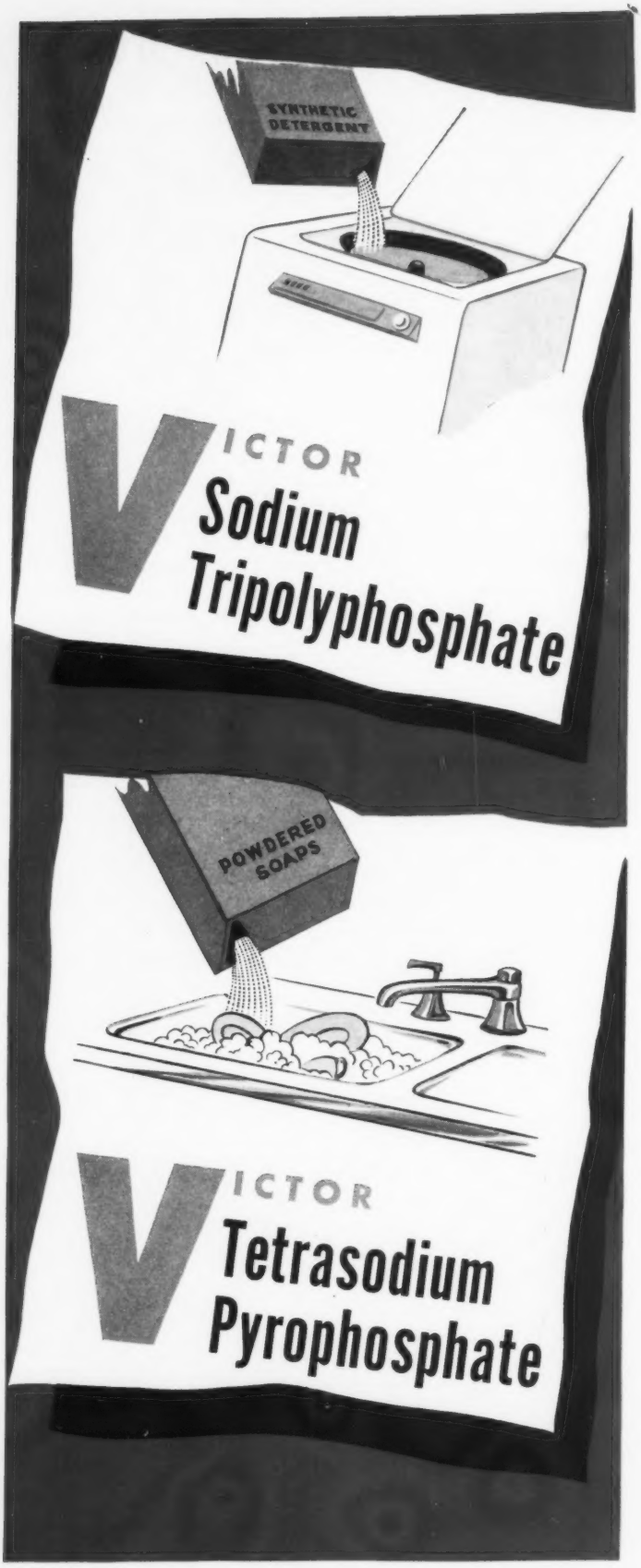

Products and PROCESSES

Non-Ionics Solubilize Oils

Non-ionic emulsifiers permit the reduction or total replacement with water and emulsifier, of alcohol commonly used to dissolve perfume oils, according to a recent release by Atlas Powder Co., Wilmington, Del. Hygroscopic emulsifiers such as "Tweens G-2162 or G-7596P" are recommended as solubilizers for perfume oils and other water insoluble materials. A formula for solubilized hexachlorophene runs as follows:

A	Hexachlorophene	1%
	Tween 40 or Tween 60	9%
B	Water	90%
	Preservative	q.s.

Preparation: Heat (A) to 70°C. Stir to dissolve the hexachlorophene. Cool to room temperature. Agitate the mixture, and add water slowly.

—★—

Starch Foaming Agents

A foaming agent, water-soluble either as such or after the addition of alkali, comprises a starchy material in which some of the hydroxyl groups are substituted by hydrophilic groups and some of the hydroxyl groups by hydrophobic groups containing at least three carbon atoms. The hydrophilic and hydrophobic groups are either ether or ester groups and present in such amounts that upon subjecting an 0.5 percent aqueous solution of the foaming agent in pure form to a foam test the height of foam produced after three minutes at 20° is at least 30 mm.

In an example, 1000 parts by weight potato starch, 1500 parts by volume hot water, and 250 parts by volume 10*N* NaOH are mixed and 116 parts $PhCH_2Cl$ is added. The mass is heated for one hour to 90°, neutralized with HOAc, and the reaction product is precipitated with EtOH and dried. The starch ether thus prepared is easily soluble in cold or warm water and 0.5 percent solution in the above test gave a foam of 122 mm. after three minutes at room temperature. British patent 699,530 (1953), through *Chem. Abstracts,* vol. 48, p. 6720.

—★—

Continuous Hydrogenation

Blaw-Knox Co., Chemical Plants Division, Pittsburgh, Pa., recently announced that it is exclusive licensing agent for a Belgian process for production of fatty alcohol by continuous hydrogenation. The SBA (Societe Belge de L'Azote et des produits Chimiques du Marly) process consists of the following steps: 1) continuous methyl ester production (transesterification, fat splitting followed by esterification); 2) continuous hydrogenation of the carboxy groups; 3) continuous hydrogenation of the unsaturation existing in the raw material; 4) continuous fractional distillation of the crude alcohol.

Data on yield and operating costs are based on actual successful operations in Belgium, according to Blaw-Knox. Pilot plant facilities for the testing of domestic raw materials are available.

Blaw-Knox is in position to erect complete plants using this process for the production of fatty alcohols for consumption by manufacturers of household detergents, shampoos, dishwashing compounds, laundry soaps, etc.

—★—

Making Quaternaries

Aryl sulfone alkyl or aralkyl amido-alkyldialkylamines are converted into their quaternary compounds by the action of quaternizing agents, with heating if necessary, in a solvent. As amines of the above type *p*-toluenesulfonethylamidoethyl diethylamine, *p*-toluenesulfonobenzylamidoethyl diethylamine, and compounds prepared by the action of di-*n*-propylaminopropyl halides on substituted aryl sulfonamides are specified. Alkyl halides and sulfates, aralkyl halides, aryloxyalkyl halides (e. g. phenoxy and naphthoxy) and alkyl aryl sulfonates, alpha-halogen acylamides, N-substituted or not, and N-haloalkylimides are specified as quaternizing agents.

In examples, the above tri-substituted amines are treated with benzyl bromide and chloride, dimethyl sulfate, *n*-butyl bromide, beta-bromoethylphthalimide, beta-(beta[1]-naphthoxy) ethyl bromide, methyl *p*-toluene sulfonate, and alpha-chloracetanilide. The resulting quaternary compounds are surface-active agents of high anti-bacterial activity. British patent 669,321, Ward, Blenkinsop & Co. Through *Manufacturing Chemist,* June 1954, page 277.

—★—

Bacteria Protect Skin

The bacteriostatic defenses of the human skin consist of its resident bacterial flora and not of its acid mantle, according to Koechel, *Deutsche Apothekerzeitung,* 1952, 30, 542. In an experiment, penicillin-resistant staphylococci were placed on hands which had previously been treated with penicillin and on untreated hands. After several hours the staphylococci were undetectable on the untreated hands, whereas they were demonstrable in masses on the penicillin treated skin. The penicillin did not affect the acid layer of the skin. But it did destroy the normal bacterial flora.

—★—

First Chi. Oil Shipment

Chicago shipping authorities attached considerable significance to the arrival there recently of a Dutch tanker from Amsterdam with a cargo of palm kernel oil consigned to the Hammond, Ind., plant of Lever Brothers Co., New York. The 600 tons of oil represented the first import of bulk oil to Chicago direct from an overseas port and it is understood more will follow. Previously such shipments of oil in bulk had been unloaded at eastern seaboard ports and then moved inland by rail. This time the tanker, *Maureen,* making its maiden voyage, came down the St. Lawrence river and through the Great Lakes to Chicago's Calumet Harbor Terminal.

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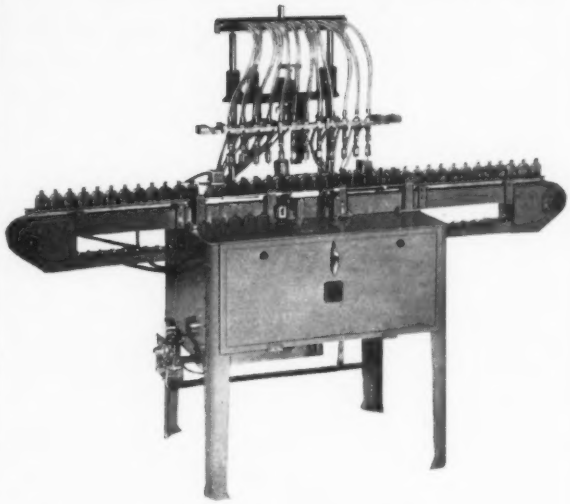

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In addition to this important money-saving feature, the Perl Straight Line Bottle Filler offers these advantages:

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NEW Patents

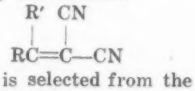
The information below is furnished by patent law offices of

LANCASTER, ALLWINE & ROMMEL
402 Bowen Building
Washington 5, D. C.

The data listed below is only a brief review of recently issued pertinent patents obtained by various U. S. Patent Office registered attorneys for manufacturers and/or inventors. Complete copies may be obtained direct from Lancaster, Allwine & Rommel by sending 50c for each copy desired. $1.00 for Canada. They will be pleased to give you free preliminary patent advice.

No. 2,684,595. Detergent Meter, patented by Herbert J. Wollner and George S. Freeman, Boston, Mass., assignors to American Conditioning House, Inc., Boston, Mass. The patent describes apparatus for testing the effect of a solution on a sheet of fibrous material. The apparatus comprises a container for the solution, in the container two opposed screens spaced apart a predetermined distance and adapted to receive a disk of fibrous material loosely therebetween, and means for conjointly moving the screens back and forth in a direction transverse of their planes through a stroke substantially greater than said distance, whereby a sheet placed between the screens parallel to the screens is impacted flatwise by the screens alternately from opposite sides.

No. 2,683,659. Herbicides, patented by Arthur H. Schlesinger and David T. Mowry, Dayton, O., assignors to Monsanto Chemical Co., St. Louis. The method of destroying undesirable plants is disclosed which comprises applying to said plants a toxic quantity of a herbicidal composition including, as the active ingredient, a compound selected from the class consisting of malononitrile and derivatives of malononitrile, said derivatives having the formula



in which R is selected from the class consisting of the cyclopropyl, the furyl and the thienyl radicals and R′ is selected from the class consisting of hydrogen and the methyl radical.

No. 2,684,947. Noncaking Silicofluoride Compositions, patented by Maurice G. Kramer, Dearborn, Mich., assignor to Wyandotte Chemicals Corp., Wyandotte, Mich. The patent describes a mixture consisting essentially of a compound selected from the group consisting of ammonium, magnesium and zinc silicofluorides and mixtures thereof and containing in intimate admixture therewith approximately 0.3-1.0 percent, by weight, of a light grade magnesium oxide having a density of less than about 10 pounds per cubic foot.

No. 2,684,946. Washing and Disinfecting Composition, patented by Adolf Schmitz, Essen, Germany, assignor to Th. Goldschmidt, A. G., Essen, Germany. A washing and disinfecting composition is patented comprising a mixture of two to nine parts by weight of an acid additon salt of a polyethylene polyamine compound selected from the group consisting of diethylene triamine and triethylene tetramine carrying one alkyl substituent containing 12 to 16 carbon atoms on one of the terminal amino groups and one to two $-CH_2COOH$ substituents on the other terminal amino group as a washing component and one part by weight of the hydrochloride of diethylene triamine carrying an octyl substituent on each terminal amino group and one $-CH_2COOH$ substituent on one of the nitrogen atoms thereof as a disinfecting component.

No. 2,684,378. Process for Fractionating Glyceridic Mixtures Obtained as Hydrocarbon Solutions, patented by Evald Laurids Skau, New Orleans, La., assignor to the United States of America as represented by the Secretary of Agriculture. A process for the production of a winterized cottonseed oil is disclosed, which comprises incorporating in a cottonseed oil-hexane-water solution enough acetone to provide an acetone-hexane ratio of about 85:15 in an acetone-hexane-water solution containing about 40% cottonseed oil, cooling to about —8° C. and removing the solids.

No. 2,683,660. Herbicidal Composition, patented by Arthur H. Schlesinger, Dayton, O., assignor to Monsanto Chemical Co., St. Louis. A herbicidal composition is patented comprising an oil-in-water emulsion of a dialkyl chloromaleate in which each alkyl radical has from one to 12 carbon atoms, said chloromaleate being present in said emulsion in a quantity which is toxic to plant life.

No. 2,684,377. Process for Modifying Glyceridic Fats and Oils, patented by Evald L. Skau, New Orleans, La., assignor to the United States of America as represented by the Secretary of Agriculture. The patent describes a process comprising interesterifying peanut oil by heating in the presence of sodium methylate catalyst, destroying the catalyst with phosphoric acid, and adding acetone and hexane in the ratio of 85 to 15 parts by weight, respectively to form a forty percent solution of the oil in the acetone and hexane, and chilling to about —13° C., and removing the solids formed.

Trade Marks

(From Page 87)

Johnson's Rainbo Polish—This for shoe polishes. Filed Oct. 22, 1952 by Johnson's Polish Products, Elgin, Ill. Claims use since Oct. 14, 1952.

Telvar—This for weed killing compounds. Filed Feb. 15, 1954 by E. I. du Pont de Nemours and Co., Wilmington, Del. Claims use since Feb. 3, 1954.

Impact—This for sanitizer, disinfectant, germicide, bactericide and deodorant. Filed Feb. 15, 1954 by Industrial Soap Co., St. Louis. Claims use since Dec. 2, 1952.

Green Cross—This for ant and roach poison. Filed Feb. 20, 1952 by James A. Lemons, d.b.a. Green Cross Chemical Co., Birmingham, Ala. Claims use since April 15, 1931.

Chlorocide—This for chemical compound use for the treatment of red spider mite. Filed Mar. 16, 1954 by Boots Pure Drug Co., Ltd., Nottingham, England. Applicant claims ownership of British Registration No. 610,836, dated Feb. 22, 1940.

corky—This for liquid cleanser for metal surfaces. Filed Jan. 13, 1954 by McAlpine Co., Creve Coeur, Mo. Claims use since Sept. 8, 1953.

Dri-Clor—This for bleaching agent. Filed June 12, 1953 by Pennsylvania Salt Mfg. Co., Philadelphia. Claims use since Oct. 20, 1952.

Elimin-8—This for liquid household insecticides. Filed July 28, 1953 by Webster Products, Inc., New York. Claims use since June 3, 1953.

FELSENE—This for alkyl aryl sulfonates. Filed Aug. 21, 1953 by Fels and Co., Philadelphia. Claims use since Aug. 10, 1953.

BOLT—This for aerosol insecticides. Filed Nov. 3, 1953 by Bostwick Laboratories, Inc., doing business as Spray Maid Products Co., Bridgeport, Conn. Claims use since June 10, 1948.

GRIPSHEEN—This for liquid floor preservative coating. Filed Feb. 19, 1953 by West Disinfecting Co., Long Island City, N. Y. Claims use since Jan. 1, 1953.

Puff—This for shaving cream. Filed No. 2, 1951 by Regal Chemical Corp., Broklyn, N. Y. Claims use since Oct. 31, 1951.

GL-70—This for bacteria reducing agent used in dentifrice. Filed Jan. 22, 1953 by Procter & Gamble Co., Cincinnati. Claims use since Dec. 11, 1952.

BOUNTY—This for dentifrice. Filed Feb. 3, 1954 by Procter & Gamble Co., Cincinnati. Claims use since September 10, 1953.

NOXFILM—This for cleaner for wood, metal, porcelain, tile, etc. Filed Feb. 7, 1952 by S. V. Cain, Inc., Peoria, Ill. Claims use since Feb. 14, 1951.

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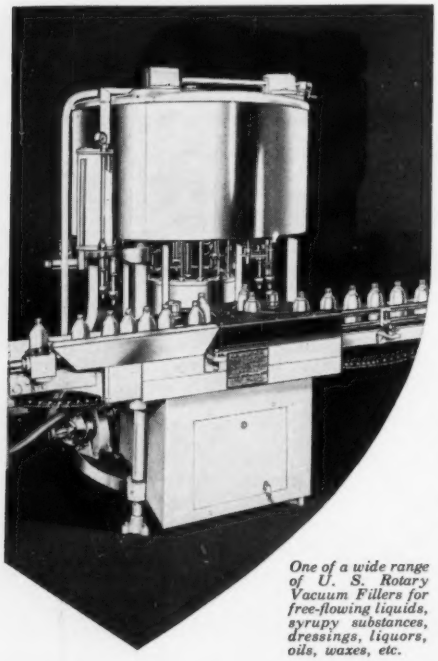

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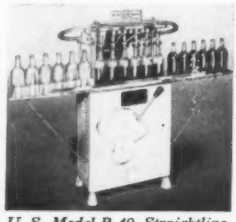
For quotations, state nature of product, containers used and production line capacity. "Rotary Filler Bulletin" describing basic mechanisms mailed upon request.



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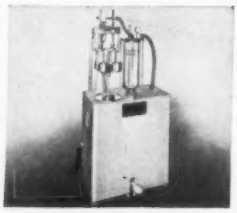

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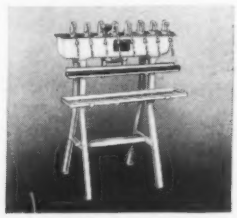

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SOAP PLANT Observer

By John W. McCutcheon

THE largest single raw material for detergent manufacture is dodecylbenzene sodium sulfate. Fewer than 130,000 tons were made in 1951, 153,000 tons were produced in 1952 and in 1953 production totaled over 182,000 tons. The 1953 production represents about 250,000 tons of 100% active product or one billion pounds of a 25 percent active detergent, although the average percent active in the products sold under this classification is probably closer to 22 percent. The balance of the retail detergent field is made from fatty derivatives, principally the sulfated tallow and coconut alcohols.

Recently, a fellow consultant expressed surprise when he learned that the free market for dodecylbenzene was very limited. By free market, he was referring to the available supply that could be spot purchased as against the huge quantities being sold on long term contract. This particular consultant thought he was "passing along" information of a valuable nature and seemed surprised that the writer did not get out his black book and jot down some notes.

However, this situation is quite well known in the trade. A little mathematics, not too involved, shows that only about 30,000 tons of the hydrocarbon is purchasable on a free or open market. The large users are well known to all and need no elaboration here. The petroleum producers, of which there are now a number, no longer bother with substitutes or products made by inferior methods. The product is almost invariably made from the tetrapolymer of propylene, properly fractionated and attached to benzene. One producer tried a variation on this several years ago, by using toluene instead of benzene. He was badly burned in the process.

It is possible that toluene can and may be used in the future, but not as of now. A process to produce this important detergent raw material by the Friedel Crafts synthesis of a chlorinated kerosene fraction appears likewise to have failed to come up to expectations. As far as is known, only one American producer still uses this process. Whether of significance or not, this same producer has recently withdrawn manufacture of an associated retail product. Apparently, it just could not stand the pace set by the tetrapolymer.

The petroleum companies have been forced, because of this supply and consumer relationship, to depend on sales of the hydrocarbon to make their profit and less and less on the sale of detergents themselves. The export market looks promising and the writer is acquainted with several such steady outlets. This is also just a temporary situation since many of the foreign firms importing American hydrocarbon are just waiting the chance to purchase the material from a local petroleum firm to save the high costs of transportation. When this happens, there is going to be a genuine squeeze put on fat based detergents. Unless tallow really keeps low in price, say at four to five cents a pound, it may be priced out of the market. This will affect the petroleum producer's profits, too, and he may actually have to get into the fat derived detergent field. This may sound fantastic but there is some thinking along these lines or this would not be written here!

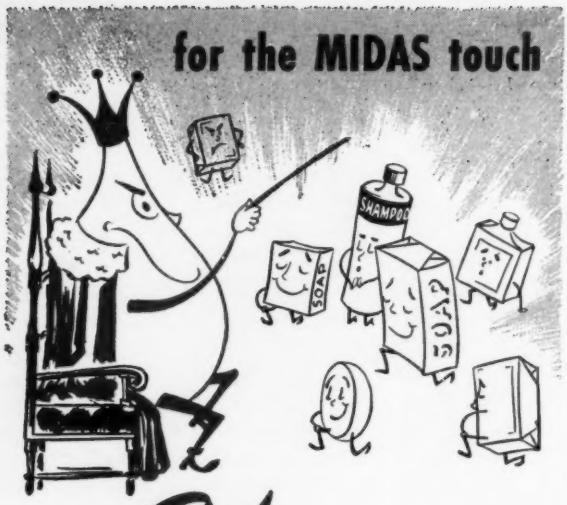
There may be some who object to the way the Tariff figures are calculated by the writer, contending that the figures given already represent the sulfonated product and therefore should not be increased from 150 to 250,000 tons. This is a good point. However, how else can the known production of detergents be fitted to the raw material other than by increasing them. It is the feeling here that the reported production by the Tariff Commission, as large as it is, is still very much on the conservative side.

* * *

A SPANISH/English dictionary of soap and synthetic detergent terms, published by E. T. Boehme of Havana, Cuba, was mentioned in our column in the July issue of *Soap*. The reaction was fast and furious. Both the writer and the publishers of *Soap* have received a number of inquiries as to how much the dictionary costs and where it may be obtained. Actually the little book, which is a series of about 30 mimeographed sheets stapled together, is not quite as important as some apparently were led to believe. Possibly it was wishful thinking on the part of our readers and possibly it was the absence of anything better. We did not mean to convey the impression that the work is a very pretentious one. However, we will attempt to get a better address of the publisher and the price of the dictionary for those who are interested.

* * *

THE writer has been invited to address the first World Congress of Detergents scheduled to be held at the Sorbonne in Paris, Aug. 30-Sept. 5. About 70 other Americans are expected to attend, including Dr.



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Thomas H. Vaughn, director of research of Colgate-Palmolive Co., Jersey City, N. J., and Vova Blinoff of American Alcolac Corp., Baltimore, both of whom were to speak. A complete report of the Congress will appear in the October issue of this publication.

— ★ —

ADM Fatty Chem. Catalog

The issuance of a new 40-page technical catalog of its fatty chemicals was announced recently by Archer-Daniels-Midland Co., chemical products division, 2191 W. 110th St., Cleveland 2, O. The 44-page catalog lists in its table of contents such subjects as test definitions (of fatty oils), introduction to "Hydrofol" fatty acids, their specifications, compositions and uses, ADM fat chemicals chart, introduction to sperm oil products, their specifications, compositions and uses, introduction to Adol alcohols, their specifications, compositions and uses, cross-section of ADM Chemifats in industry, solubility charts and useful tables.

Rhodinol

(*From Page* 105)

a rather poor approach to the rhodinol odor. Now, for the first time, perfumers have a true, quality rhodinol available at approximately half the price of the Geranium Bourbon product. Additional advantage to the perfume industry is the fact the new rhodinol is standard in price, being free of the normally wide variations characteristic of Geranium Bourbon rhodinol.

Odorant

(*From Page* 97)

fect, the maker says it has a repellent action on flies and other insects. It is further claimed for the product that it prevents deposition of, or destroys, insect larvae and prevents rats from making a haven and breeding place within garbage dumps. "Sanifil" is available for jobber distribution in all size containers from one gallon up to 55.

NPCA Convention Dates

The annual convention of the National Pest Control Association will be held Monday through Thursday, Oct. 18-21, at Miami Beach, Florida. The convention headquarters will be the Hotel Di Lido, Miami Beach's newest and largest hotel. Announcement of the coming meeting was made last month by Ralph E. Heal, executive secretary of N.P.C.A.

Letters

(*From Page* 37)

were used to mask soap fat odors. However, after we had gone to press with the July issue, we received word from the author that he favored "odorant." Ed.

Disagrees on Irritation

Editor:

The two articles by Dr. Louis C. Barail in your April and June, 1954, issues have caused some ripples in the soap and detergents manufacturing industry. The main thing I did not like was your subhead in your June issue, which said, "High pH of Soap Main Cause of Primary Irritation, etc.," and I disagree with Dr. Barail's conclusions.

1. He is a toxicologist and, therefore, concerned with internal poisons. His conclusions are based on intradermal injections. Normally, soaps or detergents do not come in contact with the derma at all unless it is used to wash out cuts and wounds. The derma, being a sensitive layer, is covered by the epithelial, which at its base produces keratin cells. These keratin cells as they move towards the surface, die and eventually are sloughed off. The epithelial layer is non-sensitive and non-vascular. It is bathed with what is called the skin's acid mantle, excretions of the sebacic and sweat glands situated in the dermal layer. This both keeps it supple and also acts as a physical and bacteriostatic barrier to the body. Soaps and detergents remove this acid mantle on washing *through emulsification*. If it is not replaced, the skin will become dry and chapped and be open to invasion by germs, which could cause dermatitis. Proper rinsing, however, reverses this situation nearly entirely and the glands themselves restore the acid mantle normally within 30-60 minutes.
2. Naturally free alkalis, or of course, free acids, will attack the skin and break it down chemically. This is corrosion or burns.
3. The pH of soaps will range from 9.8 to 10.2. Of anionic detergents from 7 up to 9 — nonionics are 7 and cationics from 5 to 7. Sulphonated oils range around 6.
4. pH is a potential, merely measuring the pressure of hydrogen ions present. By itself it is not an actuality and like all potentials (a bucket poised over a well) requires something else to change it. In this case it may be hydrolysis but soaps and detergents though they ionize freely in water, being electrolytes, do not hydrolyze to any significant extent according to the best authorities. Therefore, there are only insignificant quantities of hydroxyl ions present during a washing.
5. Any factor causing undue irritation to the skin is not then due to hydrolysis or to be measured by pH. It is known that cationics are more irritating than anionics. Anionics are harder than natural soaps on the skin. The reason has nothing to do with pH but on their superior defatting power — in other words their greater Lp factor, Lp standing for lipophilic or oil-loving degree.

On all sides today there is entirely too much nonsense written and talked about pH. It has got as much out of proportion as the recent craze for chlorophyll.

W. S. Jessop, President
U. S. Sanitary Specialties Corp., Chicago

MarketResearch

(*From Page* 45)

and marketing research data is available from sources outside of your company. This information may be secured from:

1. Other companies
2. Independent consultants
3. Syndicated services
4. Advertising agencies
5. Advertising media
6. Trade associations and other associations.

Also, a great deal of information may be obtained from various public agencies. Much of this information is available at very low cost—in many instances, the information is a matter of public record.

If you adopt the suggestion made earlier of finding who is now doing your market research, you may be able to organize the activity at very little additional cost to your company.

Beyond this point — your market research activity can cost whatever you care to or can spend profitably. I would like to add this word of caution—don't buy more market research than you can use—don't buy more market research than your people will use.

For nonrecurring problems, serious consideration should be given to the use of outside consultants or agencies. The use of such agencies is generally more economical than enlarging your own department. Your own market research group should be used to check any research purchased or otherwise secured from outside agencies — particularly that which you obtain as a package. Let your own group check on the methods used in obtaining the information and determine the validity of the information.

There is a great deal of correlation between the techniques employed and the cost of any given research project. Money can easily be spent needlessly in obtaining a greater degree of accuracy than really is required in a given project designed to assist in solving a particular problem—accuracy is relative. Before deciding on a particular technique to be employed, first determine the accuracy you must have — then determine the cost — finally determine what you want to spend for the solution to a given problem, and see what accuracy you can get for this amount of money. Going around in a circle in your thinking may save you money. Unless you are willing to spend the money—in order to secure the accuracy you think you need—you probably don't need the information anyhow.

The cost of market research may be reduced considerably by making pilot surveys or pilot studies. Quite often, a pilot study can be made at low cost and you may come up with the answer or you may get a better idea of the amount of research which would be required in order to obtain an answer, or you may come up with the information that this particular problem may not be researchable.

Don't be frightened off from undertaking research because you *think* it will cost a lot of money. Check into it and see just how much it will cost. Many companies do not use test panels simply because they think such test panels are expensive. In actual practice, some test panels may be established at very low cost and in some cases at no actual "out of pocket" cost.

Earlier I pointed out the five steps which generally are recognized as being the basic technique used in using market research to help solve business problems—you will recall these are:

1. Defining the problem
2. Selecting a good sample
3. Developing sound techniques
4. Interpreting the findings impartially

And the fifth step was—to use the findings. This fifth step is the one which quite often requires a great deal of courage. You must have the courage to use the findings—you must have the courage to act upon your interpretation of the information which has been received as a result of the research work. This is sometimes a tough thing to do—when the results don't conform to someone's pet theories, or when the results confirm what one of your men has been calling you and you have been telling him he's crazy.

If you would rather "fly by the seat of your pants"—ok!—some fellows can be quite successful using this method, but don't give "lip service" to market research—don't have a market research department just to talk about it to your business cronies, or don't have a market research department just to scare your competitors.

If you do engage in market research — conduct your study — make sure everything is ok!—then go ahead.

In securing the action — in using the findings—let's recognize the limitations of staff men, for your market research will almost certainly be a staff department. Don't expect the staff men to sell the ideas for you—they can help to sell the idea, but it is up to you to do the actual selling.

You will also have to avoid line people or operating people vetoing market research ideas without their having given thought to the problem.

Market research can be an important management tool — the market research which you are now doing is contributing to your company's earnings. The more thought we can give to the use of this objective approach to solving the problems we encounter in conducting our business—the more advantageously we can employ market research—in order that it might become a still greater contributor to earnings.

— ★ —

Old Empire Name Change

Old Empire Mfg. Chemists, Inc., Newark, N. J., recently announced the company name has been shortened to Old Empire, Inc. The Newark contract packaging firm remains under the same management.

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H. W. HAMILTON, *Secretary*

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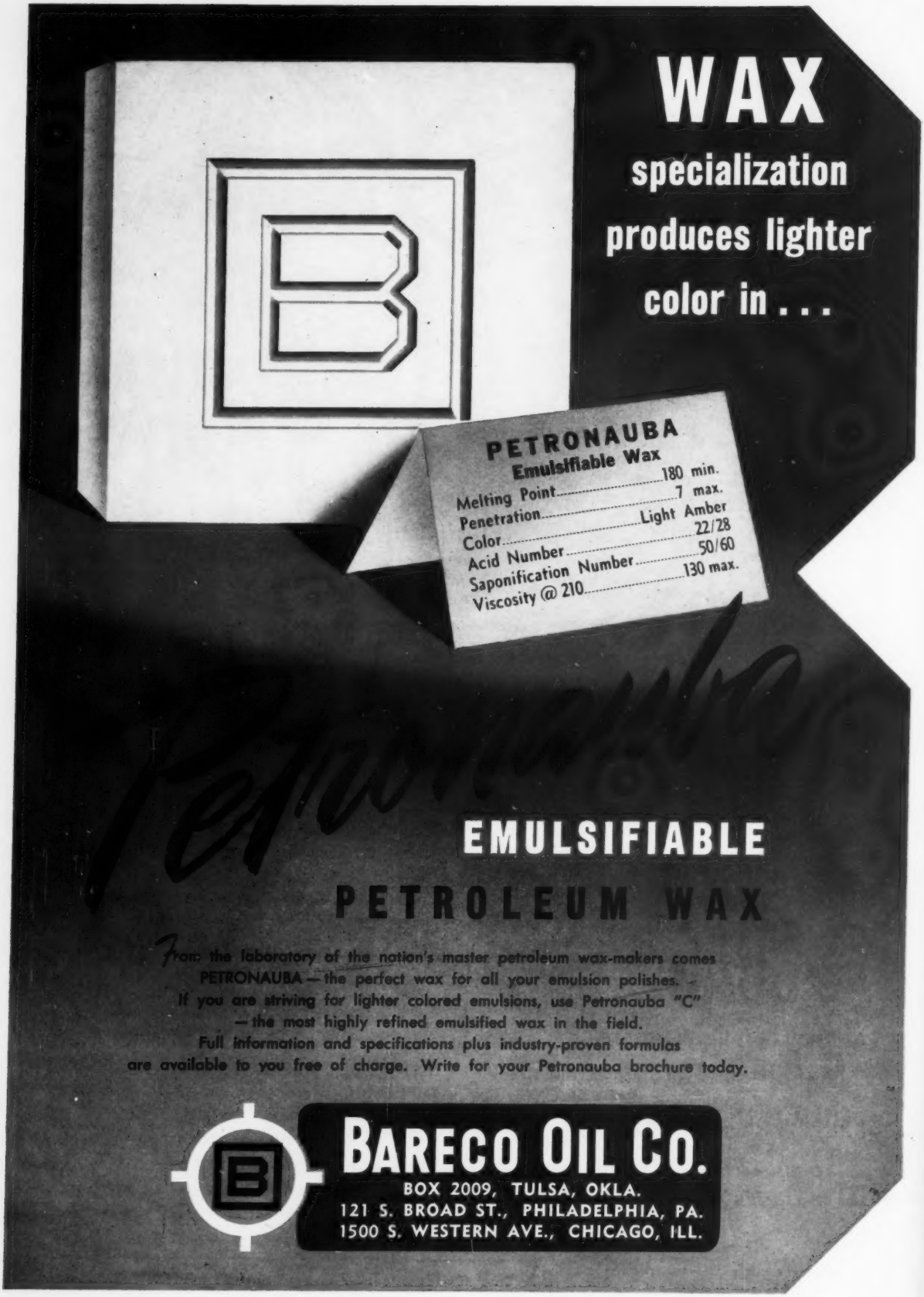
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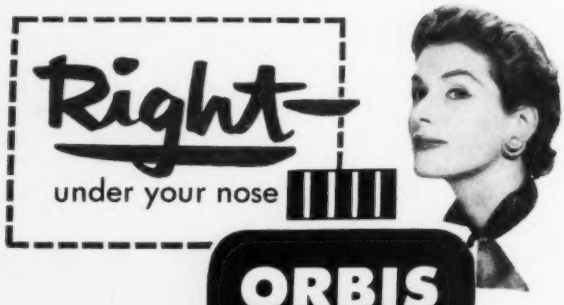

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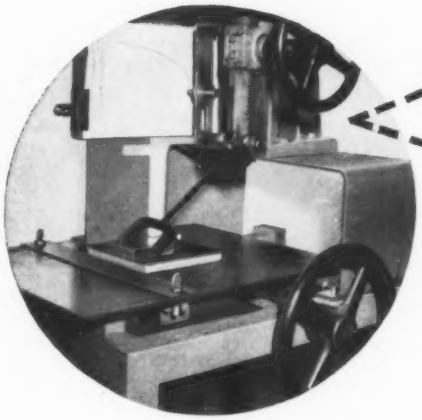

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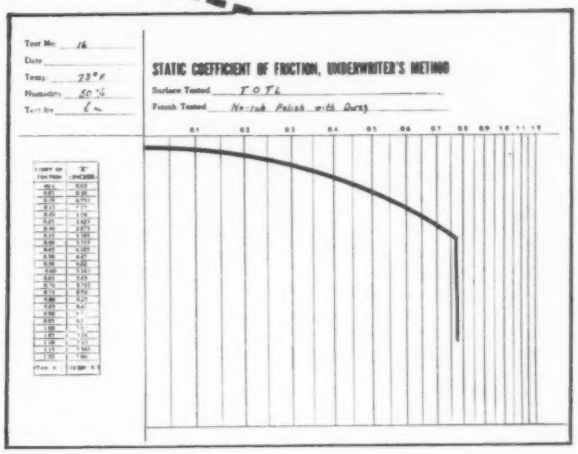

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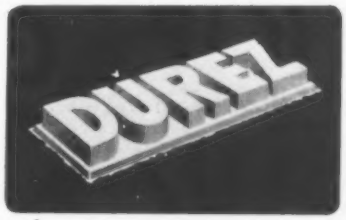

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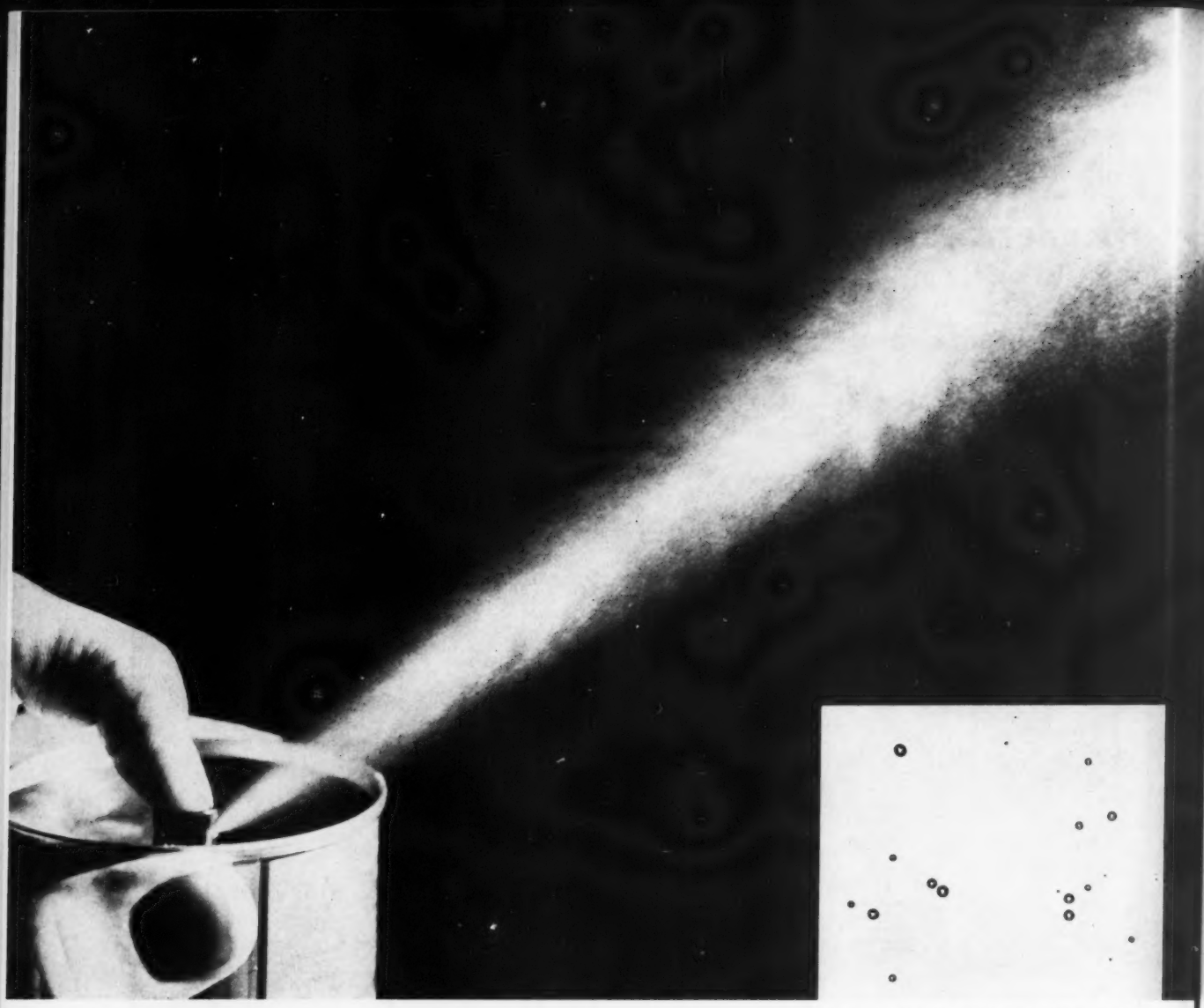

Testing droplets of aerosol insecticide for size. 80% must be smaller than 30 microns . . . *all* under 50 microns . . . and none must remain together. (Photo Magnification: 50x).

PARTICLE SIZE . . . another aerosol check point at Du Pont

Since the effectiveness of aerosol sprays is linked very closely to particle size, it's an important field of study at Du Pont's "Kinetic" Sales Service Laboratory. Here experienced chemists conduct many tests on active ingredients and "Freon"* propellent formulas to measure the effect of changes in formulations on particle size.

These laboratory experiments include varying the pressure within containers . . . testing results with different "Freon" propellents . . . checking the effects of various solvent compositions. Solutions are sprayed on glass slides (see above). Time, distance and velocity are constant, and the droplets are measured to see that they meet the Department of Agriculture's rigid size and distribution standards. All this care and control helps us develop "tailor-made" "Freon" propellent formulas that help assure top effectiveness.

Particle size is but one of several check points used by Du Pont in evaluating aerosol formulations. And, when considered together with "Kinetic" laboratory studies on compatibility, density, stability, flammability, air and water content, it explains why so many aerosol manufacturers and packers consult Du Pont for technical assistance.

There's still another reason: the dependable, uniform quality of Du Pont "Freon" propellents. These propellents are selected for the vast majority of aerosols on the market today because they are safe . . . nonflammable, nonexplosive, noncorrosive and virtually nontoxic . . . equally ideal for use with space, surface-coating or water-based aerosols.

It pays to have technical information at your finger tips—so if you're planning to add an aerosol to your line and would value any or all of these Du Pont laboratory services, simply write: E. I. du Pont de Nemours & Co. (Inc.), "Kinetic" Chemicals Div., Wilmington 98, Delaware.

KINETIC

FREON

REG. U.S. PAT. OFF.

SAFE PROPELLENTS

**"Freon" is Du Pont's registered trade-mark for its fluorinated hydrocarbon propellents.*

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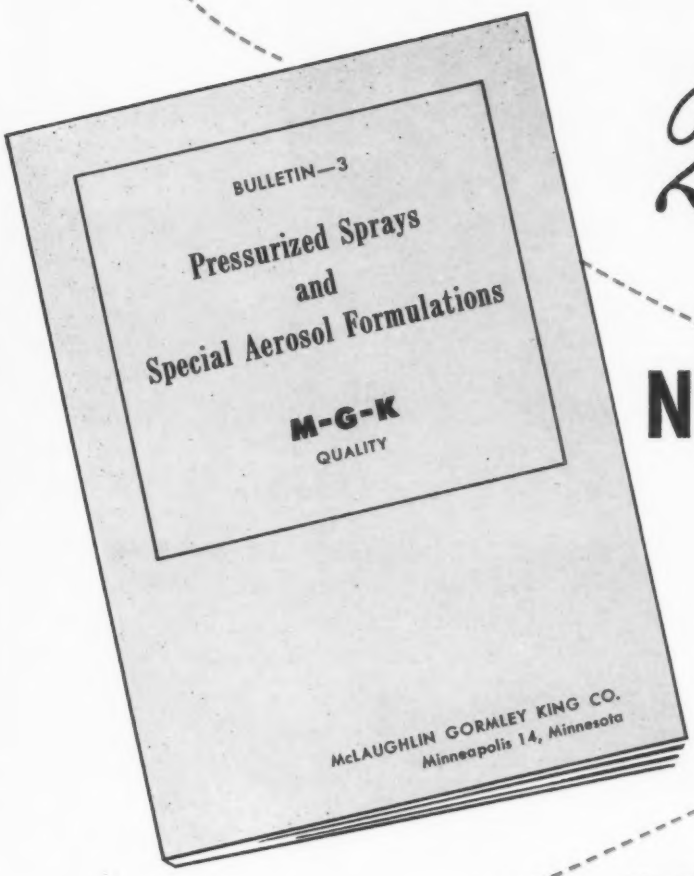

20 Ways to open NEW MARKETS

Write today for Bulletin No. 3.

The ideal reference manual—Bulletin No. 3 contains 20 formulas for pressurized plant sprays, pressurized roach sprays, pressurized push-button cattle sprays, pressurized garbage can sprays, a dog bomb and aerosol formulations meeting government specifications.

Use directions included—Complete use directions for all 20 of the above sprays are included in Bulletin No. 3.

Labeling information included—Approved and detailed labeling information for each of these sprays is furnished.

McLAUGHLIN GORMLEY KING Company

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Gentlemen: Please send your Bulletin No. 3 on Pressurized Sprays and Aerosols.

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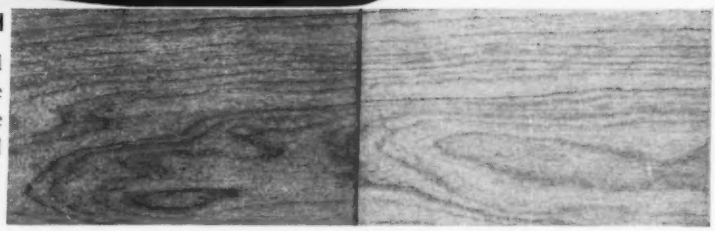
*Address*_____

*City*_____ *Zone*___ *State*_____

FEDERAL STAYLIGHT
FAST-DRY PENETRATING SEALER

THIS ACTUAL COMPARATIVE PHOTOGRAPH demonstrates the difference! A conventional penetrating sealer has, as usual, darkened the left side of this wooden panel. The right side retains its light, natural color when sealed with **FEDERAL STAYLIGHT!**



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FAST DRYING
Walk on it 3 hours after application.

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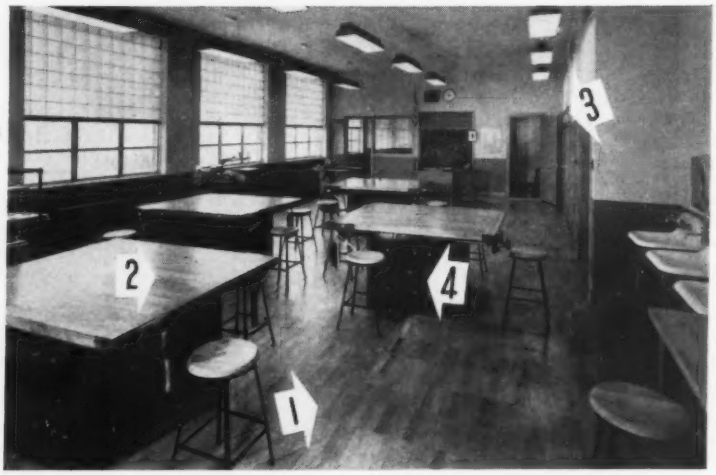
Formulated from newly developed raw materials that give greatly increased durability.

CONTROLLED PENETRATION
Staylight penetrates evenly when applied to porous surfaces, eliminating waste and increasing economy.



USE STAYLIGHT ON THESE TYPICAL SURFACES

① FLOORS ② TABLE TOPS
③ WOODWORK, DOORS, PANELING
④ METAL SURFACES

This premium quality sealer is formulated for outstanding wear. It dries fast to eliminate costly delay occasioned by out-of-service floors. It is the lightest sealer in color that can be applied to wood, linoleum, cork, and concrete floors . . . and to other similar surfaces requiring sealing without discoloration. Staylight dries so rapidly, two-coat work can be finished in one day when Staylight is used as a first coat or prime for itself, for Gym finish, or for other finishes. This product of research and development, the first *different, superior sealer* in thirty years, is ideal for:

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Fairfield Chemical Division Plant, Baltimore, Md.

Pyrenone* under New ownership

As of September 1, 1954, the insecticide business of U. S. Industrial Chemicals Co. Division of National Distillers Products Corp., has been purchased by Food Machinery and Chemical Corporation. Included in this transfer of operations are U.S.I. laboratories and manufacturing facilities in the Fairfield industrial section of Baltimore, Md.

Effective the same date, Food Machinery established the Fairfield Chemical Division as a completely separate division to manufacture and sell insecticide materials and other diversified chemicals.

Operations of the Fairfield Chemical Division of Food Machinery and Chemical Corporation will continue to be handled by the experienced people who have been identified with the operations of the insecticide division of U.S.I. No changes in policy or basic procedure are contemplated now or in the future. The Fairfield Chemical Division will continue to serve customers of Pyrenone, and related products, as they have been served in the past by U.S.I.

Headquarters sales offices of Fairfield Chemical Division will be in the Graybar Building, 420 Lexington Ave., New York 17, N. Y. Branch offices will be located in Chicago, Kansas City, San Francisco, New Orleans, and other strategic points.

Both Food Machinery and National Distillers are cooperating to make certain that the transition of ownership of insecticide operations causes a minimum of inconvenience to customers.

*Reg. U.S. Pat. Off., F.M.C.

FAIRFIELD CHEMICAL DIVISION

FOOD MACHINERY AND CHEMICAL CORPORATION

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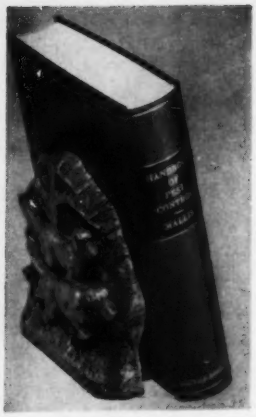

HANDBOOK OF PEST CONTROL

by Arnold Mallis

THE new HANDBOOK of PEST CONTROL by Arnold Mallis, a completely revised edition, is on the press and available for distribution.

▲ The new edition contains more than 200 illustrations—a much larger and more complete volume than the original HANDBOOK by Mallis, published in 1945 and out of print since 1948.

▲ This newest pest control reference volume deals primarily with household and industrial pests, insects, rodents, etc., their habits, identification, and latest methods of control. It is the most complete work of its kind ever offered in a single volume.

▲ Those who have used the original HANDBOOK by Mallis undoubtedly will want this new, up-to-date volume, a standard reference book which should be in the library of every pest control operator, insecticide manufacturer and marketer, entomologist, chemist and others interested in modern materials and methods of pest control.

▲ The new HANDBOOK of PEST CONTROL by Arnold Mallis measures six by nine inches, has a sturdy binding in green cloth, gold stamped. The book comprises twenty five chapters, running to a total of 1067 pages and is printed on durable, long-lasting paper.

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rats and mice
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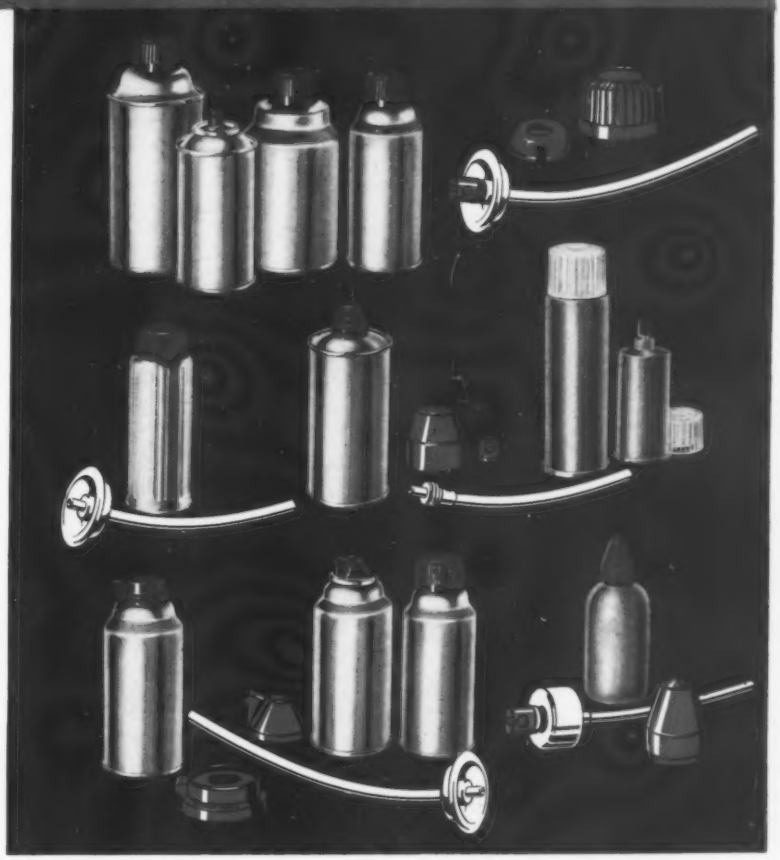

• So widespread has been the public acceptance and demand for self-dispensing packages equipped with colorful Precision valves, that new type products and additional brands are added daily to the long list enjoying the plus values offered by Precision. To keep pace with this tremendous growth, Precision's production and research are continually expanding both here and abroad so that your package may have the merchandising and technical advantages of a Precision valve regardless of the product, container or filling method involved.

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PRODUCTS . . . Plastic construction eliminates corrosion enabling Precision valves to perform efficiently for all products whether foam, residual or true aerosol.

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AVAILABILITY . . . The world's largest aerosol valve manufacturing facilities, are combined with the latest production methods and techniques, to give production schedules that assure prompt deliveries.

• We invite your inquiry to enable our staff of aerosol valve technicians to work cooperatively in satisfying your valve requirements.

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October 15th...

Closing date for entries in the 1954 AEROSOL FESTIVAL package competition is October 15. Awards to be made at the 41st Annual Meeting of the

CHEMICAL SPECIALTIES MANUFACTURERS ASSOCIATION

AT THE HOTEL NEW YORKER, NEW YORK

DECEMBER 6-8, 1954

. . . to include judging and selecting of best aerosol packages of the year

Divided into ten classes as follows:

1. Insecticides, repellents, moth proofers.
2. Room deodorants.
3. Lacquers, enamels, other protective coatings; paint remover.
4. Other household products—polishes, glass cleaner, rug shampoo, water repellent, etc.
5. Shave products.
6. Hair preparations.
7. Other personal products — shampoo, body deodorants, sun tan oil, drugs, etc.
8. Snow, all types.
9. Industrial products — lubricants, belt dressings, stencil inks, etc.
10. Glass and plastic packages — all products.

. . . a top award for "best in the show" will also be made

Rules of the contest:

1. All entries will be made in the name of the brand owner or marketer.

2. Entries will close October 15, 1954. All entries should be sent as soon after Sept. 15 as possible to the Committee at the CSMA office, and should comprise one completely assembled empty container with attached tag showing (a) name and address of brand owner, (b) class in which entry is made.

3. Only one entry may be made by any marketer or brand owner in any one class, but entries may be made in as many classes as desired.

4. Entries are open to any aerosol brand owner or marketer anywhere, and are not restricted to members of CSMA. There are no entry fees or other charges to entrants.

5. Best packages will be selected in ten classes and a "best package in the show" will be named. Judging will be done by a group of qualified experts. Their decisions will be final and will be announced and awards made at the 41st annual meeting of CSMA in Washington.

★ ★ ★

For entry blanks or information, write to

AEROSOL FESTIVAL COMMITTEE

Chemical Specialties Manufacturers Assn.

110 East 42nd St., New York 17, N. Y.

THE

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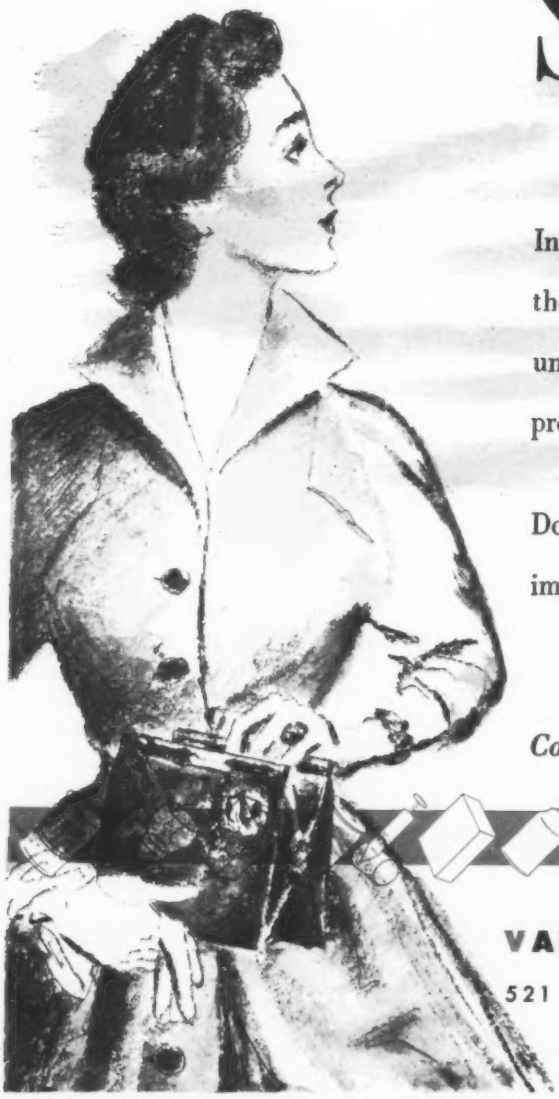

In paints, aerosols, insecticides,
the elimination or improvement of inherent
unpleasant odor has time and again
produced a remarkable improvement in sales.

Don't ignore odor — improve it, and
improve sales.

Consult those who know odor best.

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- Dust Absorbers
- Dye Penetrants
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- Flower Tints
- Glare-Proof Glass Sprays
- Graphite Lubricants
- Gun Oils
- Hosiery Protectants
- Household Products
- Ignition Coatings
- Ignition System Driers
- Insecticides & Herbicides
- Insulation Coatings
- Lubricants
- Metal Lubricants
- Metal Polishes
- Mildew Preventives
- Mold Release Sprays
- Paints & Lacquers
- Penetrant Oils
- Plastic Protective Coatings
- Poultry Inhalants
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11
12 MIXES

Whatever aerosol product you now market or plan to introduce—whether it is a space spray, surface-coating, or residual type—there's a "Genetron" propellent to meet your needs.

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(TRICHLOROMONOFLUOROMETHANE)

genetron 12
(DICHLORODIFLUOROMETHANE)

For most applications, mixes of "Genetron" 11 and "Genetron" 12 offer optimum vapor pressures and excellent compatibility with a wide range of materials. With them you can select and get the ideal performance characteristics for your particular product.

The 50-50 mixture of "Genetrons" 11 and 12 has proven to be the most adaptable blend for the bulk of general uses. Other combinations varying from 25 to 90% "Genetron" 12 provide the answer for many hard-to-formulate materials ranging from low-pressure specialties to high-pressure space sprays. That's because variations in the proportions of "Genetrons" 11 and 12 result in corresponding variations in the particle size of the spray, solubility characteristics, and hydrolysis rates.

Helpful Technical Service—With one of America's finest aerosol laboratories, General Chemical will be glad to help you get started toward profitable, properly formulated pressure-propelled products as additions to your present line. The same sound technical service that has guided so many aerosol marketers in their development program is yours for the asking—in confidence and without obligation.

Another useful aid: Ask for up-to-the-minute "Genetron" aerosol bulletin which contains lists of contract fillers, valve and container manufacturers; other suppliers you will want to know about in considering your aerosol program.

For further information, call or write your nearest General Chemical office.

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HYAMINE makes odorless, non-irritating, chemically stable sanitizers

In meat packing plants the preferred way to clean meat cutting tables is to remove greasy residues first with an alkaline cleaner containing TRITON X-100, a Rohm & Haas non-ionic detergent. Then a HYAMINE sanitizer is applied. HYAMINE penetrates the wood and reaches breeding places of germs, maintaining residual activity against later growth of organisms.

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HYAMINE and HYAMINE-TRITON cleaning compounds are preferred *for janitorial work* in hospitals, schools, and buildings of all types. Cleaning personnel like the quick-acting, dirt-removing action of TRITON detergent. They appreciate the odorless, non-irritating qualities of HYAMINE solutions. Institution and building managers profit from the versatility and fast, germ-killing cleaning activity of HYAMINE-TRITON sanitizers.

Good sanitation procedures and healthy cows are *both* necessary to produce good milk. Cleaning is easy and fast when detergent-sanitizers containing HYAMINE and TRITON are used. These compositions have consistently helped farmers produce low bacteria-count milk. Reports on field trials and on the wide-spread use of HYAMINE-TRITON detergent-sanitizers on dairy farms will be sent at your request.

Soda fountains, restaurants, bars and cafes find HYAMINE-formulated compounds effective and low-cost sanitation aids Glassware, dishes and silver are protected against bacteria when sanitizers containing HYAMINE are added to the rinse water. Workers like sanitizing solutions based on HYAMINE because they are odorless and do not irritate the skin. HYAMINE germicides are effective bacteria killers over a wide range of water temperatures. They withstand long exposure to high temperatures without decomposing or volatilizing.

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Dress any floor with Clear LAB-COTE . . . and you put down a transparent, tough, long-wearing, protective film of amazing lustre. It's like covering your floors with the beauty of cellophane! Not a wax, LAB-COTE is easier to apply. Any unskilled person can do it. Moreover, LAB-COTE keeps floor upkeep down. It is a LAB Cost Control Chemical for industrial sanitary maintenance. Clear LAB-COTE wears longer and is easy to maintain. It repels dirt. Damp mopping cleans it. Buffing restores its shine. When necessary, LAB-COTE is readily removable. This clear, resilient film provides sure-footed walking . . . dazzling beauty . . . and longer protection for ALL floor surfaces.

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Chemical Service of Baltimore, Inc.

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Schrader has the greatest research facilities to meet your special requirements in this ever-expanding field. Schrader produces aerosol valves with fully automatic machinery . . . maintaining complete control of production, because nothing but raw materials are bought outside. Schrader even makes its own metal closures. So whatever your aerosol valve requirements are, buy the best . . . buy Schrader!

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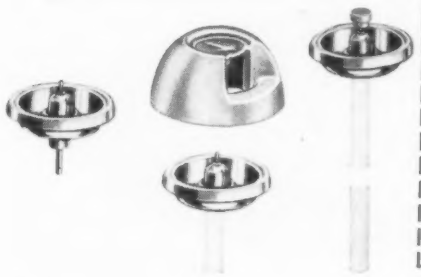
Use our research facilities to develop a superior Aerosol package. Send for samples and further information.

AEROSOL VALVES made by the manufacturer of the Standard Tire Valve since the first Automobile



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The GERMICIDE With the Delightful Mint ODOR.

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Excellent as a foot bath for prevention of Athlete's Foot.

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If it is impractical to mop, Mint-O-Phene can be effectively used as a deodorant Spray.

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Adults of Webbing Clothes Moth →

Photo by R. L. Purdy, courtesy Gulf Oil Corp. from "Handbook of Pest Control", by Arnold Mallis, second edition, published by Mac Nair Dorland Co., New York.

THE mothproofing of wool blankets is a subject of interest alike to the housewife and the launderer or cleaner. Some brands of blankets now carry a guarantee of permanent protection against insect attack, having been treated, during manufacture, with one or other of the comparatively limited number of substantive compounds which remain in the fabric throughout its life. In other cases where a less permanent compound has been used and where the blanket has been subjected to a number of washings, it may be desirable to restore its original insect-resistance. However, it is probable that the majority of wool blankets sold on this continent have not been treated, in any way, to give them such protection and hence the most convenient ways of doing this are of considerable interest to the launderer and cleaner who frequently undertakes to "mothproof" blankets as an added service.

Since it is not practical for the launderer or cleaner to carry out durable treatments on blankets, it has been customary to make use of non-durable compounds which, being removed in laundering or cleaning, have to be re-applied if protection is to be maintained. A number of compounds of this type e.g., DDT (1,1,1-trichloro-2,2 bis (p-chlorophenyl) ethane) and methoxychlor (1,1,1-trichloro-2,2,-bis (p-methoxyphenyl) ethane), to mention two, are in current use by dry cleaners who apply them in solution in dry cleaning solvent, as a final rinse following the cleaning operation.

Until recently, the launderer has been in a somewhat less favorable situation with respect to the availability of a readily-applied compound which was free from undesirable effects on the fabric. Thus, for example, some use has been made of inorganic fluorides, and silicofluorides, but the toxic nature of the former and the acidic nature of the latter do not give them a wide appeal. The silicofluorides, especially, when used in amounts required to protect against insect attack, tend to cause harshening of the wool and to produce a certain amount of free fatty acids in the wool by reaction with residues of soap sorbed by the wool during the laundering operation; and the fatty acid residues so formed may lead to rancidity on subsequent storage.

The compound DDT has recently (1) become available in the form of water-dispersible concentrates suitable for use in laundering operations and the purpose of this work was to investigate the feasibility of applying DDT in this form during the laundering of woolen goods, and also to determine the resistance to moth attack of wool so treated. In view of the increasing use of synthetic detergents in the commercial laundering of wool, three of these, two of the anionic type and one of the non-ionic type were included, along with soap, in this study.

Materials

TWO commercial preparations of DDT were used, designated as Compounds A and B, respectively. Compound A was sold as a preparation for use in home laundering operations while Compound

B was sold as an agricultural insecticidal spray not specifically recommended for the treatment of washable woolen goods. Both of these products contained approximately 25 percent DDT together with a non-ionic emulsifying agent and a suitable solvent, and both emulsified spontaneously on mixing with water, Compound A giving a somewhat more stable emulsion as judged visually. A limited amount of work was also carried out on a commercial preparation consisting of an aqueous emulsion containing 10 percent DDT stabilized with a cationic emulsifying agent (Compound C).

The wool used for the tests was a scoured, unbleached flannel weighing about 7.3 oz. per sq. yd. Prior to use it was extracted for three hours with diethyl ether and for 18 hours with ethyl alcohol in a Soxhlet apparatus and finally it was rinsed thoroughly in four to five changes of distilled water and dried.

The folowing detergents were used:

(a) Soap—a medium titre soap manufactured commercially.

(b) Synthetic detergent No. 1—an anionic detergent of the sodium alkyl sulphate type, containing about 30 percent active ingredient.

(c) Synthetic detergent No. 2—an anionic detergent of the alkyl aryl sulphonate type containing about 40 percent active ingredient.

(d) Synthetic detergent No. 3—a non-ionic alkyl aryl polyethylene oxide condensation product containing 100 percent active ingredient.

Lab-scale Experiments

METHODS: The initial trials were carried out on a small scale in a Launderometer using glass jars of one pint capacity. The load consisted of 10 gm. of the prepared wool cut into pieces about two inches by two inches, and, except where otherwise noted, the washing formula comprised one suds of 10 minute duration with 100 ml. of detergent solution at 100°F., followed by three rinses of five minutes each with 100 ml. water also at 100°F. The required amount of DDT concentrate was weighed out, made up to 250 ml. with water, and mixed thoroughly. A 10 ml. aliquot of the resulting emulsion was transferred by pipette to the Launderometer jar, the DDT being added either to the detergent solution or to one of the rinses as indicated below. Distilled water was used throughout. At the conclusion of the washing cycle the wool was dried in an oven at about 190°F.

Except for the measurements of rate of exhaustion, in which the DDT content of the residual bath liquor was determined, the DDT content of the treated wool was determined directly by the method described by Gunther. (2). The weighed sample of wool (approximately 10 gm.) was extracted with benzene for at least two hours in a Soxhlet apparatus and then the bulk of the benzene was distilled off, leaving a residue of three to five ml. The residue was refluxed gently for 30 minutes with 50 ml. *N* alcoholic potassium hydroxide, then 50 ml. water, 50 ml. 2 *N* nitric acid and a second 50 ml. water were added by pouring down the condenser tube. The condenser was removed and five ml. of C.P. nitrobenzene was added by an excess (usually 20 ml.) of N/100 silver nitrate solution. The flask was shaken vigorously to coagulate the silver chloride, and cooled under running tap water. A three ml. portion of indicator solution* was added, and the mixture was titrated with N/100 potassium thiocyanate solution. The thiocyanate solution was standardized against C. P. sodium chloride. By this procedure the hydrolysis of the DDT is such that only one chlorine atom per DDT molecule is converted to potassium chloride.

The percentage of DDT on the sample was calculated as follows:

$$\% \text{ DDT} = \frac{35.45 \text{ N (B-T)}}{\text{W}}$$

where N=normality of KCNS solution
B=titration of reagents in the absence of DDT
T=titration of unknown solution
W=weight of sample

For the determination of the DDT content of emulsions, an aliquot of the emulsion (10 to 25 ml.) was measured out and refluxed with 50 ml. of *N* alcoholic potassium hydroxide, the balance of the procedure being the same as given above. In calculating the results, the volume of sample taken was substituted for the weight, and the results were expressed as grams of DDT per 100 ml. of emulsion.

The accuracy of the method was evaluated by applying known weights of DDT to pieces of wool and then determining the DDT content. For this purpose pieces of wool measuring about two inches by three inches were held in a horizontal position and 0.2 ml. of the DDT concentrate was dropped on to the cloth from a one ml. graduated pipette. The weight of 0.2 ml. of DDT concentrate as measured by this method was found to be 0.2033 gm., and since the DDT content was 25.3 percent (by analysis), the weight of DDT applied to each piece of wool was 0.051 gm. The amounts determined by triplicate analyses were 0.049, 0.053, and 0.051 gms. This was considered to be sufficiently accurate for the present work.

DDT Pickup Rate

THE rate of pick up of DDT was measured by agitating 10 gm. of wool with 200 ml. of dilute DDT emulsion in the Launderometer at 100°F. The machine was stopped at intervals of five, 10, 20 and 40 minutes and a 25 ml. aliquot of the emulsion was withdrawn for analysis. In order to study the effect of detergent on the rate

*The indicator solution was prepared by dissolving 10 gm. C.P. ferric ammonium sulphate in 50 ml. water, adding dilute nitric acid until no further reduction in color was observed, and diluting to 100 ml. with water.

TABLE I. Rate of Exhaustion of Treating Bath

DDT Preparation	Compound A			Compound B		
Preliminary Washing	None	Soap	Synthetic Detergent No. 1	None	Soap	Synthetic Detergent No. 1
Initial Conc'n. of Emulsion, gm DDT/100 ml.	0.0560	0.0583	0.0673	0.0523	0.0530	0.0523
Time, min.	**Reduction in Emulsion Concentration, %**					
5	66.5	67.6	19.9	85.5	84.3	48.5
10	67.8	67.8	27.6	86.9	84.3	49.9
20	73.1	68.8	37.9	85.5	78.9	48.5
40	82.5	70.0	42.3	84.1	70.2	48.5

of pick up of DDT, a 10 gm. portion of wool was given a 10 minute wash in the Launderometer with 200 ml. 0.5 percent soap or 0.75 percent synthetic detergent No. 1 solution, followed by one five minute rinse in water. The wool was then squeezed as dry as possible by hand and transferred to a jar containing 200 ml. of dilute DDT emulsion and the remainder of the procedure was carried out as above. The results are given in Table I, in which the data are given as percent reduction in emulsion concentration, i.e.,

$$\frac{C_o - C_t}{C_o} \times 100 = \% \text{ reduction in emulsion concentration}$$

where C_o = concentration of emulsion at beginning of run
C_t = concentration of emulsion after running t minutes.

This figure gives some indication of the amount of DDT retained by the wool, but does not correspond exactly to the percentage of the DDT picked up, since the amount of emulsion removed from the system for analysis is not taken into account.

It is apparent from Table I that the exhaustion of DDT from the treating bath is comparatively rapid, the exhaustion at the end of five minutes being, in all but one case, at least 80 percent of the final value. It is also apparent that Compound B exhausts more rapidly than does Compound A, although the total exhaustion after 40 minutes' treatment is about the same for both products.

Microscopic examination of the two emulsions showed that the average diameter of the oil drops in the Compound B emulsion was considerably larger than that of the drops in the Compound A emulsion, although a wide range of drop sizes was observed in both emulsions. This fact could perhaps explain the difference in rate of exhaustion. It is probable that the larger oil drops are more rapidly filtered out by, or deposited on the wool leading to a rapid initial pick up of DDT. The larger oil drops, however, may be located more or less on the surface of the wool where they could be more readily dislodged by mechanical action during the longer treatment. This might lead to an actual loss of DDT from the wool on prolonged treatment as noted in some cases.

On the other hand, the smaller drops of the A emulsion might be picked up less rapidly in the initial stages, but might be held more firmly by the wool once they have been picked up, resulting in a gradual increase in net pick up with increasing time of treatment.

Preliminary washing with soap appears to reduce the pick up of DDT to some extent with both

TABLE II. Effect of the Detergent on the Pick-up of DDT from Compound A.

DDT added in:	Suds		1st Rinse		2nd Rinse	
Detergent	**DDT Content of Wool, %**					
None	0.35		—		—	
Soap, 0.5%	0.07		0.19		0.47	
Soap, 0.2%	0.17) 0.11)	0.14	0.19) 0.19)	0.19	0.23) 0.14)	0.19
Synthetic Detergent No. 1, 0.2%	0.05		0.07		0.13	
Synthetic Detergent No. 2, 0.2%	0.04		0.09		0.13	
Synthetic Detergent No. 3, 0.2%	0.10) 0.03)	0.07	0.43) 0.37)	0.40	0.39) 0.41)	0.40

TABLE III. Effect of Repeated Treatments on DDT Content of Wool (Compound A)

Number of Treatments	1	2	3
DDT Content of Wool, %	0.23	0.22	0.32
	0.14	0.29	0.13
	0.13	0.12	0.10
Average	0.17	0.21	0.18

emulsions but the effect is not very marked. Preliminary washing with synthetic detergent No. 1, on the other hand, resulted in a considerable reduction in the pick up of DDT with both emulsions, and at the present time the reason for this is not known. The concentration of synthetic detergent No. 1 used (0.75%) is comparatively high and it is possible that enough of this material was carried over in spite of the single rinse to have some detergent effect during the DDT treatment stage.

Effect of Detergent

IN these tests the wool was given the normal laundering treatment using 0.2 percent solutions of the various detergents for the suds. The DDT was added either (a) in the sudsing operation, (b) in the first rinse, or (c) in the second rinse. In addition another test was carried out in which 0.5 percent soap was used for the suds and a second test in which no detergent was used, i.e. four water rinses were given, the DDT being added in the first rinse, which was of 10 minutes duration corresponding to the suds of the normal washing cycle. A stock emulsion of Compound A was made up containing seven gm. of the concentrate in 250 ml., and 10 ml. of this was used for each test, providing enough DDT to give about 0.7 percent on the wool if it were all picked up. Some of the tests were carried out in duplicate in order to obtain some information regarding the reproducibility of the test. The results are given in Table II.

It is apparent from Table II that where the DDT is applied in the sudsing operations the presence of detergent causes a marked reduction in the amount picked up. There does not appear to be any very significant difference between the various detergents in this respect. When the DDT was added in the first rinse some improvement in pick up was noted in every case, and when it was added in the second rinse still further improvement was obtained in three out of five cases. This seems to indicate that the DDT should be added at a point in the washing cycle as far removed as possible from the sudsing operation, i.e. when the concentration of detergent in the system has been reduced as much as possible. The comparatively high pick up obtained when DDT was added in the first rinse following a wash with synthetic detergent No. 3 is probably related to the free-rinsing characteristics of the non-ionic detergents. It is known (3) that non-ionics are adsorbed by wool to a lesser extent than are other detergents, and consequently it is probable that, in the case of the non-ionic detergent, the latter was largely eliminated from the system even in the first rinse. This suggests that non-ionic detergents are preferable for laundering woolens which are to be treated with DDT.

It was also noted that when the DDT was added in the suds, the amount of lather formed was subsubstantially reduced. This might quite possibly result in decreased efficiency in the laundering of soiled woolen goods.

TABLE IV. Effect of Rinsing on DDT Content (Compound B)

	DDT Content of Wool, %
Rinsed	0.46
Not rinsed	0.48

Effect of Repeated Treatments

SAMPLES of wool were given three complete washing treatments with 0.2 percent soap, Compound A, in an amount to give 0.7 percent DDT on the wool if completely picked up, being added in the second rinse in every case. Analyses of the DDT content of the wool were made after one, two and three treatments, the results being given in Table III.

While the reproducibility of the data of Table III leaves something to be desired, the average values indicate that there is little or no tendency for the DDT content of the wool to build up on repeated treatments. It may be concluded from this that the DDT in treated wool is substantially removed during subsequent washing operations.

Effect of Rinsing

SINCE the DDT in treated wool is effectively removed during some stage of the washing procedure, it was desirable to know whether this removal occurs only during the sudsing operation or whether some DDT is also removed during the rinsing operation. If the latter were true it might account for the low pick up observed when the DDT was applied in the suds and was followed by several rinses with water.

A stock emulsion was prepared containing 7.15 gm. of the Compound B concentrate in 250 ml. of emulsion, and two 10 gm. portions of wool were treated in the usual way with 100 ml. of water to which was added 10 ml. of the

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Polystyrene Type Latices in Self-Polishing Floor Waxes

By Lloyd H. Perry and Robert S. Sweet*

Union Bay State Chemical Co.

WE will attempt to show in this article how much polymer latices can contribute to floor wax performance when these latices are properly designed for this use.

Before doing so, however, let us review the regular polymer latices that have been available in the past. For the most part, they were developed for uses other than waxes. As usually happens in such cases, their use in floor waxes left much to be desired. Here are some of the ways in which these latices were deficient.

First, there is particle size. Water emulsion type floor waxes have particle sizes ranging from 0.05 to 0.08 microns and the upper limit is quite critical for good gloss. Some of the really fine polymer latices have particles as low as 0.1 microns. Most, however, are 0.2 or over. It is obvious that such large particles will not give desired gloss.

Secondly, very few polymer latices have freeze-thaw stability. A large number don't even have good stability at room temperature. Stability is very important to the wax chemist whose products sometimes stand for months before being used.

Thirdly, there is the soap system. Most polymer latices are prepared in rather strong emulsifying agents that are quite water soluble. Such emulsifiers tend to degrade any wax formulation to which they are added. They soften the film and make it less water resistant. They are not the emulsifiers that have been found best in self-polishing floor finishes.

In addition to these three common faults there are others, but these suffice to show some of the problems which regular polymer latices present. None of the faults mentioned is due to the polymer itself. Particle size, stability, soap system, these are all part of the colloidal dispersion system. In other words, best results were not obtained from polymers because they were improperly dispersed. This is important, and was the starting point in our search for a better polymer for water emulsion-type floor finishes.

Polymer Latices Defined

WHAT do we mean by polymer latices? How do they differ from water soluble polymers or resins? The water soluble resins contain rather large proportions of polar groups and are usually permanently soluble in water or alkaline solutions. Because they form solutions, their molecular weight must be kept low; otherwise, they act as thickeners and give high viscosities.

Polymer latices, on the other hand, are dispersions of polymer particles that are insoluble in water. In this respect they are comparable to wax emulsions. Since the particles are dispersed rather than dissolved, the polymer chain length has no effect on viscosity. This permits the use of high molecular weight polymers which are tough and give durable films — just the property that is desired in floor waxes.

With these facts in mind, here are the properties a polymer latex should have to be useful in floor waxes. First, it should contain a polymer with high molecular weight for durability. Second, and more important, this tough polymer should be dispersed in a system compatible with so-called self-polishing finishes. In Table I are listed the properties of a latex presently being sold under the name of "Ubatol U-2001"** which combines these properties.

"Ubatol U-2001" is based on a polystyrene-type polymer. This type is desirable for several reasons. The polymer is an extremely stable hydrocarbon molecule. It will not turn color, or oxidize, or undergo

Table I. Properties of Ubatol U-2001

Polymer	Polystyrene type
Solids content	36 ± 1%
Viscosity @ 25°C	20 cps.
pH	9.0 ± 0.3
Particle charge	Negative
Molecular weight	Over 150,000
Freeze-thaw stability	Unchanged after repeated cycles
Mechanical stability	Excellent
Heat stability @ 125°F	Over 30 days
Water resistance of film	Excellent
Compatibility with waxes	Excellent
Particle size	0.03 microns

*Paper presented at the 40th midyear meeting of the Chemical Specialties Manufacturers Association, Cincinnati, May 24, 1954.

**Made by Union Bay State Chemical Co., Cambridge, Mass.

hydrolysis. It is compatible with most floor wax ingredients. Finally, the basic monomer is available and relatively low priced.

Although an accurate measure of its molecular weight has not been made, qualitative tests show it to be somewhere between 150,000 and 200,000. Compare this with the molecular weight of common alkali soluble resins which rarely go over 2,000. The importance of molecular weight in connection with toughness should not be underrated. Perhaps the best way to illustrate the effect of molecular weight is to compare the properties of polystyrenes with different chain lengths. Starting at the low end, polystyrenes ranging up to 5,000 are liquids. From 5-15,000 they go from amorphous solids to brittle resins. Up to 100,000 they gradually get harder. As the molecular weight goes above 100,000 these polymers start to pick up toughness. This is the range that gives something substantial as far as films are concerned.

The polymer particles are dispersed in a mixture of anionic and nonionic emulsifiers, hence have a negative change. The pH is maintained with ammonia, and will remain constant as long as ammonia is not allowed to escape. There are no materials present to use up the ammonia slowly and cause a drop in pH. In spite of the high molecular weight, the viscosity of the latex is low. A water soluble resin at this molecular weight would be so thick, even at 14 per cent solids, that it would hardly pour.

The remaining properties in Table I are particularly important to the wax chemist. These include stability, compatibility, water resistance, and particle size. At room temperature the latex has excellent stability. Some of the original samples that were produced more than two years ago are still stable. This stability is also shown in the elevated temperature test.

Even at 36 per cent solids, "U-2001 Ubatol" will go through repeated freeze-thaw cycles without change. In some cases it gives freeze-thaw stability to wax formulations that do not have it by themselves.

Films of the plasticized polymer latices have excellent water resistance. They are unaffected by the wet abrasion test. At the same time, however, the films can be readily removed by soap solution. Further, this is a permanent condition. The film will not become harder to remove as it ages.

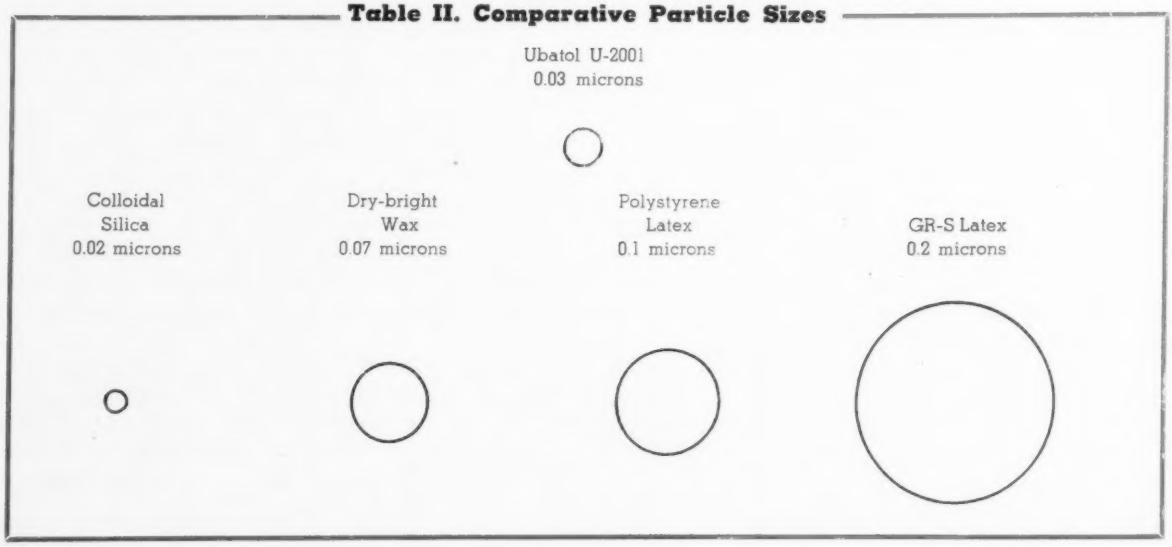
Finally, there is the particle size that is so important to gloss. On the basis of electron microscope measurements, the particles average 0.03 microns with a very few being as large as 0.05 microns. To give a better meaning to these figures, the particle size has been compared in Table II with those in a few other systems. You will note that "Ubatol U-2001" is close to colloidal silica dispersions and much smaller than other type latices. It is somewhat smaller than usual wax emulsion particles.

On the basis of these properties, the desired polymer latex had apparently been developed. A tough long chain polymer had been dispersed in a suitable latex system. The dispersed particles were small. Films from the latex were water resistant. The latex had good stability. Now let's see how it performs in actual floor finish formulations.

Since most of the emphasis in recent months has been on high resin formulations, the first comparison is of this type. Three formulas were prepared. The first is based on wax, the second is a high shellac, and the third is a high polymer. During the following discussion these will be referred to simply as wax, shellac and polymer formulas.

In all three formulas a common wax emulsion was used. This emulsion consisted of a 50-50 mixture of carnauba and oxidized microcrystalline wax dispersed with morpholine oleate.

Table II. Comparative Particle Sizes



For use in the polymer formula, the "Ubatol U-2001" was first plasticized with dibutyl phthalate according to formula in Table III.

Table III. Plasticized Ubatol U-2001

Ubatol U-2001	60 lbs.
Dibutyl phthalate	15 lbs.
Ubatol U-2001	227 lbs.
Water	548 lbs.
	850 lbs.

The plasticizer is most easily added by stirring it into a portion of the latex as shown in formula, then the rest of the latex is added, followed by enough water to reduce solids to desired point. As in every latex system, time should be allowed for the plasticizer to come to equilibrium. This may be accomplished in an hour or so by warming.

The wax based polish consisted of 83 parts wax emulsion and 17 parts "Durez 15546"* solution. The shellac based product has 20 parts wax emulsion and 80 parts borax cut shellac solution. The polymer type product consisted of 17 parts base wax emulsion, 66 parts plasticized "Ubatol U-2001" and 17 parts ammonia cut "Durez 15467"* solution. The wax formula contains a little "Durez 15546" solution in addition to the base wax emulsion to give it better leveling properties. The resin was cut in ammonia. The "Durez 15467" was used to provide better coalescence. It is more flexible than "Durex 15546." All three formulas have a solids content of 14 per cent.

In Table IV the properties of films from these three formulations are compared. The polymer formula film gave very good gloss; better than the other two on both linoleum and asphalt. The polymer formula also gave excellent leveling and showed no water spotting. In connection with the latter property, it should be noted that the shellac film was dissolved by water. Although not reported in the table, the polymer formula is easily removed with soap solutions.

*Durez Plastics & Chemicals, Inc., North Tonawanda, N. Y.

Table IV. Performance Test Results

	Wax	Shellac	Polymer
Gloss			
Linoleum	17	23	28
Asphalt	19	26	29
Leveling	Good	Excellent	Excellent
Water spotting	None	Removed	None
Slip resistance			
Asphalt	.58	.55	.54
Linoleum	.72	.58	.69
Rubber	.61	.54	.59

As far as slip-resistance is concerned, "Ubatol U-2001" does not contribute much. In fact, in this particular comparison, the polymer film is intermediate between the other two, somewhat less slippery than the shellac, but more slippery than the wax film. In contrast to the above, it should be noted, however, that generally the replacement of wax by "Ubatol U-2001" does increase slip-resistance a little.

In addition to the above tests, the three formulas were put on white asphalt tile test panels and were subjected to two weeks of medium traffic. In Table V is shown the condition of the films after this traffic. As shown by laboratory slip-tester, the polymer film was slightly more slippery than the wax film, but in all other respects; soil resistance, heel marking, wearability and gloss, it rated the best of the three. It is in performance tests of this type that the properties of the polymer show up the best. The tough polymer withstands abrasive wear very well and, since the proper dispersing system is used, "Ubatol U-2001" can be used in large enough proportions to do some good. (All of the tests reported in Table IV and V were made by an independent consulting laboratory.)

Let's spend a few minutes on a different type of formula, one which uses a much lower percentage of polymer latex. Will the polymer latex show up as well here? For this comparison, an all-carnauba wax emulsion was chosen.

The wax was emulsified in morpholine oleate and a little "Tergitol #4"* was added to aid in making the emulsion. Using this wax emulsion, two formulas were prepared as shown in Table VI. The first contained a mixture of Loba DBB Gum solution and wax. The second had the same ratio of gum to wax, with 20 parts of "Ubatol U-2001" being added. Unlike the previous example, however, the polymer was not plasticized this time. The Loba gum and carnauba wax are present in sufficient quantities to make the mixture film-forming.

Films from these two waxes were put down on various surfaces and were very similar in regard to water resistance, wet abrasion, removability, and leveling. Both were very good in all four properties.

*Carbide & Carbon Chemicals Co., New York.

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Table V. Floor Service Tests After Two Weeks

	Wax	Shellac	Polymer
Slip resistance	1 (Good)	3 (Poor)	2 (Good)
Soil resistance	3 (Fair)	2 (Excellent).	1 (Excellent)
Heel marking	3 (Fair)	2 (Excellent)	1 (Excellent)
Wearability	2 (Good)	3 (Wax removed)	1 (Good)
Gloss	2 (Good)	3 (Fair)	1 (Excellent)

Numbers indicate order of preference

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Sanitary Supply Costs...

Are commissions paid to sanitary supply salesmen too high or does the method of operating in this industry require present rates to promote sales?

IN previous articles in *Soap and Sanitary Chemicals,* (November, 1953, page 127 and March, 1954, page 163) we examined the need for higher sanitary supply prices. This need is based on the requirements of a healthy industry and better quality products for the consumer.

In the first article we reviewed the overall cost situation and the effect of inflation upon it. In the second, we dealt with what the industry had to offer the consumer in return for higher prices. In this piece we shall deal specifically with another unavoidable and really very necessary cost which has attracted some attention.

When discussing costs generally, the writer has often been attacked by non-industry observers for the "extremely high rate of compensation" paid to sanitary supply salesmen. The words above in quotes are the observer's not the writer's. Such an observation is based upon a superficial examination of the point and without regard to the fundamentals upon which it is based. But since it could become a source of attack against the industry's price structure, it merits a reply in detail.

On the surface, then, the rate of the sanitary supply industry's salesmen's earnings does appear high. It can be estimated to average about 25 cents of every dollar of sales made by the salesman. This represents adding one third of the cost to the selling price. On overall sales, including house sales, etc., this would be reduced to about 22 percent. In some instances, commissions up to 40 percent are paid on certain products, and as little as two and one-half percent on others.

Of course, there are many methods of calculating and paying commissions throughout the sanitary supply industry. Indeed, it would be surprising if any two firms employed the same system. For instance, some companies may pay straight commissions with or without a draw. Some pay commissions or fixed salaries with or without a quota bonus. Some provide automobiles, others pay travelling expenses, while still others may calculate earnings on a profit sharing arrangement. In addition, there may be combinations of any two or more of the foregoing plans of compensation. There may be branch managers or senior salesmen entitled to overrides. Based on any of these systems the average compensation will work out, give two or three points either way, to 25 percent of the sales volume.

Salesmen's compensation is only part of selling cost, which includes, as a rule, in an average business:

	percent
Salesmen's compensation	22.0

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J. H. Hinz Company, Cleveland 15, Ohio
Harry Holland & Son, Inc., Chicago 6, Illinois
J. G. Roger Chemical Co., Inc., Baltimore 23, Maryland
E. M. Walls Co., San Francisco, California
Allied Basic Chemical Co., Montreal 24, Canada
C. M. Durbin Company, Cincinnati, Ohio
Grant Chemical Co., Boston, Mass.
R. L. Kelley, Danbury, Conn.
H. C. Ross, Burbank, California

Packaging	5.0
Advertising and Promotion	1.5
Miscellaneous	1.5
	30.0

Thus selling costs amount to roughly one third of the sales dollar, of which salesmen's compensation accounts for 72 percent.

Comparing Compensation

BEFORE examining the whys and wherefores of the salesman's rate of compensation, it might be enlightening to see some of the cost figures for "domestic retail" products of a similar nature, such as packaged soaps and synthetic detergents, toothpaste, etc. In a recent survey by *Modern Packaging* (March, 1954), it was found that packaging costs—direct packaging material, labor and overhead, constituted 50 percent of the manufacturer's price for soaps and 70 percent of the cost of toothpaste for wrapping, tube and similar items. Advertising in magazines, newspapers, network radio and television is estimated to cost some 22 percent*. This probably does not include cooperative advertising, public relations, couponing and other types of promotions.

On this basis and without taking into account the mark up by retailer, there appears to be no question but that the sanitary supply industry is able to sell its merchandise for a very much lower selling cost. This comparison is a fair one since the end use of the products of both industries is identical; but it also points up two vast differences. Thus, sales to household consumers are made through advertising and merchandising, while industrial sales of sanitary supplies are made through salesmen. The components of the household industry are for the most part large business units, while those in the sanitary supply field are small or very small businesses.

Only large companies can afford substantial advertising budgets, which represent outlays in advance of sales; for the small busines unit with limited working capital it is only possible to pay by results. Thus, apart from limited and modest advertising in selected trade publications, the main selling impetus behind the sanitary supply industry's products must be through its salesmen.

To the critical observer we can answer very simply that what is lost on the swings is gained on the roundabouts. The supposed high rate of compensation of sales men in the sanitary supply industry is offset by the much lower packaging costs and modest advertising budgets. That products in the American economy do not sell themselves is such a truism that no explanation is needed, except perhaps, to quote from the latest CED (Committee for Economic Development) pamphlet, "What to do About Recessions." In its recommendations to business it lists, among others:

"Business should improve marketing methods, to make sure the consumer is well informed and effectively served . . . A revival of attention to selling is now required after neglect in the war and postwar period. If sales decline, business should not automatically cut selling efforts and advertising budgets, as it has often done in the past . . ."

This cannot be done without cost in some direction or other. So where the large soap companies increase their advertising and marketing budgets, the sanitary supply business must put on more salesmen.

The Industry Defined

AT this point, perhaps, it might be well to digress briefly. When the sanitary supply industry is referred to, and this applies to the previous articles, we are talking about an industry made up of several distinct types of business. The one thing they have in common is in the distribution of sanitary supply products.

First there are the specialty manufacturers, who make a line of products such as perhaps floor machines, brooms, brushes, waste receptacles, soap dispensing apparatus, waxes, floor seals, liquid and powdered soaps or synthetic detergents, aerosols, etc. (this list is by no means exhaustive). These manufacturers may not sell to the ultimate user but through distributors. In certain cases even in this class they may sell to the user in competition with their own customers.

Secondly, there are the general manufacturers of sanitary supply chemicals, who mainly sell to distributors or jobbers.

Third, there are manufacturers of sanitary supply products who sell direct to the user and who in most cases fill out their line with products from the specialty manufacturers. Some of this class sell generally to all industrial, commercial and institutional users. Others specialize in schools, restaurants, hospitals, industry, etc.

And fourth, there are the distributors or jobbers, who buy from the first and second classes for

"It is impossible to sell sanitary supplies without incurring adequate sales cost," says the author, who is head of one of the large sanitary supply firms. Commissions scaled to encourage selling of more profitable products.

*According to the Department of Justice complaint in a civil action taken in 1951 against Procter & Gamble Co., Cincinnati, Colgate-Palmolive-Peet Co., Jersey City, N. J., and Lever Brothers Co., New York, total sales of household soaps by the three companies were $322 million. Household detergents sales amounted to $260 million, making combined soap and synthetic detergent sales around $582 million. Approximate amounts spent by these three companies for advertising and promotion of these products was $127 million, representing about 22 percent, *or about the same percentage that salesmen's compensation figures in the sanitary supply industry.*

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. . . and bring that answer to you FREE! Merely send us a detailed request on your letterhead indicating the type of aerosol product you plan to package and the character of perfume you prefer to use. It will help us to serve you even better if you can also send along an *unperfumed* sample of your product. Then, on the basis of information given us, our laboratories will study your problem and submit for your consideration, sample aerosol formulations containing appropriate, long-lasting, stable odors at moderate cost . . . non-clogging perfume compositions that will prove completely compatible with the propellant and all other materials used. This is the most practical way to get a correctly made fragrance for your product and to test it under conditions of actual use.

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Brothers, Inc.

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BRANCH OFFICES *and* *STOCKS: *Atlanta, Georgia, Boston, Massachusetts, *Chicago, Illinois, Cincinnati, Ohio, Cleveland, Ohio, *Los Angeles, California, Philadelphia, Pennsylvania, San Francisco, California, St. Louis, Missouri, *Toronto, Canada and *Mexico, D. F.* FACTORY: *Clifton, N. J.*

resale, though they may in some cases manufacture some of their own items, or repackage and convert concentrates into ready for use dilutions. This fourth class should not be deemed to include that still numerous body of basement or garage peddlers, who mix up materials in unsanitary conditions and without quality control and hawk them at cut prices to any ill advised price conscious buyer.

Generally, when the sanitary supply industry in considered, only the third and fourth, and possibly the second of the above classes are included. Mostly the term describes the distributive end of the business.

Now we should examine the make up of the industry. According to the figures based upon the National Sanitary Supply Association's monthly business survey (now alas demised) is found the following breakdown of reporting distributing members (about 20 percent of the total) during 1952. Percentage of members doing business at the yearly rate of sales:

Over	$1 million	3.5%
"	$500 thousand	7.5%
"	$250 thousand	16.2%
"	$100 thousand	20.7%
"	$60 thousand	30.5%
Under	$60 thousand	20.6%

These percentages were averaged from 114 reporting NSSA members out of a total of about 570 distributor members of the association. Sample techniques have not always proved accurate but for the purpose here it showed that about 96.5 percent are doing less than $1 million annual sales and 72.8 percent less than $120,000.

There are perhaps about 2,500 to 3,000 more sanitary supply distributing businesses in the industry that are not members of the National Sanitary Supply Association. A few of them are on the larger side, but most presumably (and the assumption is not without merit) would be smaller businesses not inclined or perhaps unable to afford membership and the cost of attending conventions—a fair number of these may be of the peddler variety.

From the above it is quite obvious that the industry is fundamentally composed of small and very small businesses.

To be able to supply the sanitation requirements of its customers sanitary supply firms must carry in their line a wide variety of chemical compounds and all the multitudinous devices and accessories necessary for the janitor. The chemical line will include several types of liquid and powdered hand soaps, a range of floor cleaners, seals, waxes, etc., disinfectants, deodorants, specialty cleaners and polishes, aerosol products and probably insecticides. They must carry a full line of mops, brooms, brushes, floor machines, and other like equipment. Toilet room accessories such as soap dispensing equipment, sanitary napkins and dispensing machines, waste receptacles, paper towels and toilet tissues and their fixtures, plus hundreds of other items. All in all, it would not be surprising to find a catalog showing a thousand different products or a variety thereof.

Thus, the business done by the industry is in a great number of widely differing types of products and uses.

In surveys conducted in 1948 and 1954 a breakdown of sales showed the following percentages based on the value of each invoice:

Invoice value	Percentage of invoices by number	Percentage of invoices by amount
Under $10	28.4	3.1
From $10 to $25	27.6	7.6
" $25 to $50	18.1	15.0
" $50 to $100	14.9	24.7
" $100 to $200	8.2	27.0
" $200 to $500	2.3	15.4
Over $500	0.5	7.2
	100.0	100.0

That is to say about 75 percent of all sales (representing 75 percent of the amount of sales) are under $50 each. From this it is easy to see that the salesman depends on 25 percent of his orders for 75 percent of his business. From the amount of the invoice value it is easy to see by and large that the industry is geared to more than 90 percent as small orders.

Thus business done by the industry is fundamentally based on numbers of small orders.

Due to the scope of the industry, each and every building, other than homes, and including factories, institutions, public buildings, hospitals, stores, service stations, etc., are potential customers. This means that a salesman has to make a large number of calls. Due to the considerable number of businesses in the industry, some 3,000 or more, competition is severe, many sanitary salesmen are calling upon each customer. Due to the nature of the industry there may be several people to be called on at each particular call. So it can be seen that the salesman's time can be lost while he is waiting his turn, or consumed as he visits several officials and abortive when his competitors have got ahead of him.

Less Loyalty

THERE is also not the same loyalty toward brands or products of the sanitary supply industry that exists in other types of business. For one thing, there is no sustained advertising to hammer home brand names.

These foregoing salient points show that the industry:

1.) Is made up principally of small businesses;
2.) Sells mostly in small orders;
3.) Has a very wide variety of products to sell, and
4.) Has a vast number of potential customers.

Small businesses cannot afford to carry salesmen on fixed salary and, in general, can only pay for results. In that way they offer incentive to the salesman and at the same time do not commit themselves too heavily in case of any salesman's lack of success. This fact is reinforced by the second or third points, business is done mostly in small orders covering a wide variety of different products.

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SANITIZING AGENT

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In proper dilutions ROCCAL is:

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The return on these products will differ very widely, some indeed may be loss leaders.

The only way to encourage the sale of the more profitable products is by a commission schedule scaled to this end. Finally, the salesman is entitled to adequate earnings, in fact, without adequate earnings it would be impossible to to hire salesmen—the market in that regard is still highly competitive. That fact underpins the minimum, which it is necessary to pay a salesman, and ordinary business instincts generally provide a firm top limit. But in assessing a salesman's worth, it is also fair to consider what he is being paid to do and for that in order not to be repetitive, refer back to the previous article (March, 1954) and what has been written under point four. It can be seen that a lot of very hard work, considerable travelling and much lost time make up the average salesman's day. It should also be remembered that a number of factors in the changing national scene have also affected his earnings. The general acceptance of a five day week has cut his working time by 10 percent. His cost of travelling, meals, accommodations, in cases where he pays his own, have all increased. True, the number of his potential customers has increased and are more aware of the need for sanitation, but so has the number of his competitors grown. By and large, the average salesman earns every penny he makes.

If the last premise is right and no good reason is apparent to the contrary, then no matter how he is paid he is bound to incur the same proportionate cost. That then is the rub. It is impossible to sell sanitary supply materials without incurring adequate selling costs. That is the nature of the sanitary supply industry. Selling costs, like raw material costs, payroll and overhead, are legitimate and also like them subject to the same pressures due to the rapid increase in the national economy.

Hazard Labels for Specialties in New York

CHEMICAL specialties sold in New York State that contain "hazardous substances" are now required to bear warning labels. New city and state regulations to this effect became law Aug. 27. In a joint announcement of the regulations, Dr. Leona Baumgartner, City Health Commissioner, and Dr. Herman E. Hilleboe, State Health Commissioner, pointed out that: "Many compounds for home and industrial use, such as stain removers, disinfectants, insecticides, drain cleaners, stove polishes and bleaching agents, contain chemicals which make the compounds dangerous when improperly used.

This is particularly true of materials kept around the house which can be reached by children. Deaths frequently occur when children get at such materials.

"These labeling regulations are designed to get better control of hazardous substances which may not be poison according to a strict definition of poison, but which can cause serious illness and even death if improperly used."

No specific list of hazardous substances was promulgated, according to the Commissioners, who pointed out that 16 deaths in the city and 10 upstate were caused last year by accidents with or misuse of chemicals such as acetic acid, ammonium hydroxide, carbolic acid, carbon tetrachloride, cyanide and formaldehyde. Constant development of new chemicals requires constant revision, and thus no list will be issued. Instead, the manufacturer assumes responsibility for determining the hazards in the use of his product.

Manufacturers of products which prove harmful but do not carry warning labels can be prosecuted for violating the City of New York's Sanitary Code. The code requires that labels on products containing hazardous substances must prominently set forth the nature of this hazard, precautionary measures and instructions for first-aid treatment in case of contact or exposure.

The Chemical Specialties Manufacturers Association and the Manufacturing Chemists Association worked with the State and city health departments on the new laws.

—— ★ ——

Aerosol Entries, Oct. 15

Entries in the 1954 aerosol package competition to be held as part of the third annual Aerosol Festival in conjunction with the 41st annual meeting of the Chemical Specialties Manufacturers Association in New York next December, will close October 15, according to Fred Lodes of Precision Valve Corp., chairman of the festival committee. Entries must be filled out on forms obtainable from the CSMA office, 110 East 42nd St., New York, 17, and returned to that office with a sample of the aerosol package being entered on or before October 15.

The aerosol package competition is open to all comers and is not restricted to members of CSMA, Mr. Lodes emphasized. There are no fees or other charges to those who enter their packages. The entry must be made by the brand owner and is restricted to one package in any single classification. In addition to the selection of a winning package in each of ten classes, a "best aerosol in the show" will also be selected.

Entries in the package competition will be classified as follows: (1) Insecticides, repellents and moth proofers: (2) Room deodorants; (3) Paints, enamels, other protective coatings and paint remover; (4) Other household products (polishes, rug shampoo, glass cleaner, etc.); (5) Shave products; (6) Hair preparations; (7) Other personal products, (shampoos, body deodorants, sun tan oils, drugs, etc.) (8) Snow, all types; (9) Industrial products (lubricants, stencil inks, belt dressings, etc.); (10) Glass and plastic aerosols, all products.

Automotive Chemical Specialties

Part II

By Stanley W. Coryell*
R. M. Hollingshead Corp.

A. *Tire Cleaners*: Tire cleaners, specified as such, are practically without exception sold for the cleaning of white sidewall tires only. In appearance, three physical types are offered, but all are similar chemically. Normal composition is that of a potash soap made strongly alkaline with excess caustic, silicate-of-soda, etc. Wetting agents may also be present. These compounds are offered in a thin liquid sprayable form, a pourable but heavy bodied liquid form, and the almost solid, or jelly-like form which cannot be poured. All react about the same and cleaning action is generally comparable.

Powdered cleaners have also been introduced, but without great success. These consist of silica or similar abrasives mixed with powdered alkalies and sometimes a little powdered soap.

B. *Convertible Top Cleaners and Dressings*

Few good convertible top cleaners or dressings have been introduced, although a great many products are offered. These fabric tops offer many cleaning problems of a specialized nature, and a general cleaner is not too effective. A mild soap or car wash detergent offers best results. Stains may be removed by any common fabric cleaner of the naphtha-carbon tetrachloride type. On white tops, stains, such as bird droppings, may be removed by a chemical bleach. Newer fabrics, such as "Orlon" acrylic fibre, appear to offer less maintenance problems than fabrics used previously.

Convertible top dressings are usually simple mineral solvent and wax, or stearate, mixtures. Dyes may also be added to improve appearance on colored tops. Spray-on coatings have also been introduced. These may be of vinyl plastic or other materials.

C. *Rubber Dressings*

These are classified as "car appearance products", but do give a cleaning "effect" by producing a uniformity in surface appearance. Rubber floor mats, tire sidewalls, etc., gradually accumulate stains or fade to show a mottled and poor looking surface. A rubber dressing gives a smooth and uniform surface which greatly enhances the overall appearance. These compounds may be a typical oil paint (black or brown), but are more commonly mineral solvent solutions of asphalt. Rubber may also be incorporated to improve appearance and give a flexible coating.

D. *Bug Juice Removers*

Various compounds have been introduced for this purpose. They are commonly mixtures of alcohol and water, or alcohol-detergent-water solutions, such as might be used for windshield washing compounds. The bug juice remover is usually made mildly alkaline through the addition of a carbonate, ammonia, etc.

E. *Windshield Cleaners, Washing Solutions, Anti-Fog Compounds*

These have been grouped together because of chemical similarity. The windshield cleaners are normally alcohol-water-detergent combinations and are frequently made with a distinctive color. The windshield washing solutions may be identical, or may have additions of glycol or other compounds to insure anti-freeze protection. They should be non-injurious to the paint in concentrations, since in service they may lay on the hood sections

*Paper presented before 40th midyear meeting, Chemical Specialties Manufacturers Assn., Cincinnati, May 26, 1954.

immediately adjacent to the windshield. Anti-fog agents may consist of any of the above mentioned combinations. They are supplied as a liquid and, perhaps more frequently, in the form of an impregnated cloth. Simple soap impregnation or soap solutions are sometimes offered.

F. *Chrome and Metal Cleaners*

These may be of almost any composition, but can usually be classified as either an acid cleaning or abrasive type. In the former, hydrochloric, phosphoric and oxalic acids are all used. The compound may be supplied as a liquid or powder. The powdered forms sometimes also incorporate abrasives, and sodium bisulfate may be included for additional acid effect. The liquid forms frequently have a mineral or fatty oil which acts as a lubricant during the cleaning action and leaves a protective film on the metal surface when cleaning is completed. These acid cleaners, by and large, are not too effective in removing bad rust effects, or in producing a high polish effect on the metal surface. They may also be severely limited as to the kind of metals on which they may be used.

Abrasive type cleaners are simple emulsion or suspension type compounds with oils, water and abrasives. Mild alkali may be incorporated and sometimes an acid is included. Silicones and waxes are frequently added for surface protection characteristics. These cleaners are just as effective and usually more so than the acid types. In addition they can be made to produce a high polish on most metal surfaces. They rarely have any limitations as to the kind of metal on which they can be used.

G. *Waterless Hand Cleaners*

In a special group by itself is another specialty compound relatively unknown until a few years ago. These are mineral soluble soaps in mineral spirits of some type and may have additional specific solvents, lanolin, or a germicide added. They may be of a jellied or completely liquid type, and either water or nonwater rinsable. Use of these cleaners for removal of lithograph inks, asphaltic compounds, tough grease and soil deposits, etc., aids in elimination of dermatitis conditions on the hands, and by prevention of skin degreasing, as well as the deposit of an oily film on the skin, help to promote healing of nicks and to prevent further penetration of dirt.

H. *Fabric and Upholstery Cleaners*

These have mainly consisted of solvents or solvent combinations, such as naphtha, varnoline, carbon tetrachloride, etc., with or without the addition of a detergent. Wide acceptance of new vinyl upholstery coverings and revival of leather as an upholstery covering has necessitated new types of cleaners for these. Accordingly, some emulsion type cleaners have been making their appearance. These are water emulsions of mineral solvents made with emulsifiers which are also anti-static agents. Primary and tertiary amines have found some use as these agents and serve a dual function as wetting agents and detergents.

I. *Plastics Parts Cleaners*

The addition of plastic components and parts to newer automobiles has created a demand for polishes and cleaners apart from those commonly used for the car finish proper. These cleaners must remove the stains which these plastics develop, be anti-static, produce a high polish effect, and at the same time be relatively scratch-free. Fine grades of diatomaceous earths, alumina, etc., meet the requirements for abrasive fineness. As this market develops, more of these polishes will be seen.

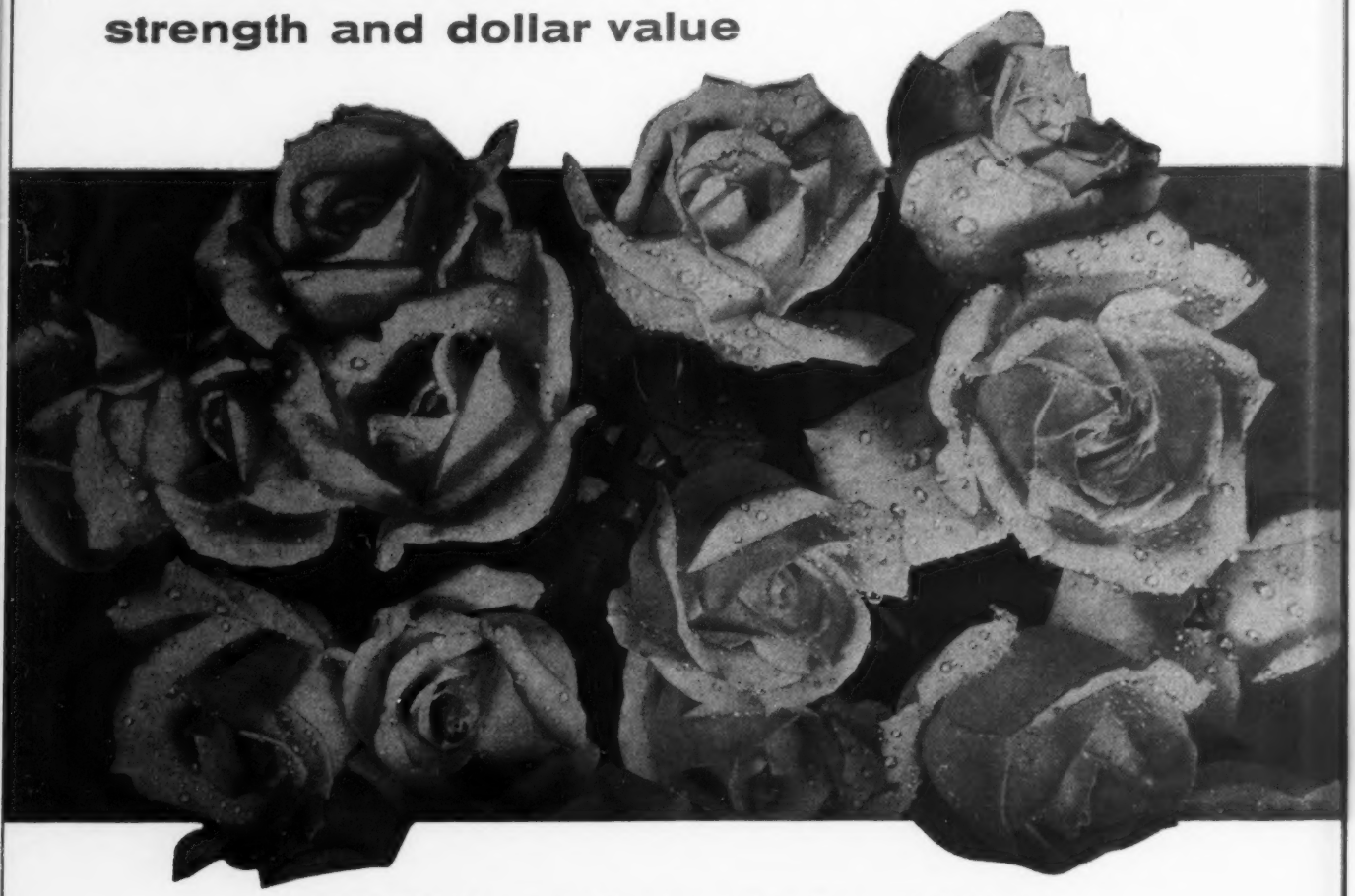
J. *Brake System Flushing Compounds*

Used normally by service outlets in brake rebuilding operations, etc., flushing compounds are not widely known. Most brands sold consist of simple mixtures of the lower alcohols, such as methanol or isopropanol. These are effective in removing all of the brake fluid still in the system after draining, as well as any contaminants that may have been present. However, they are not capable of removing sludges and residues, or varnish deposits which develop in most systems after a long period of service. A better com-

(*Turn to Page* 159)

One of the newer automotive specialties aimed at the person who washes his own car is "Suds" car wash of Help, Inc., Chicago. The product now comes packaged in a new five-wash carton form, after having been introduced originally several years ago in convenient individual pre-measured packets. The packets, which are lithographed in two colors, come in tuck-end style cartons containing five packets each.

ROSYNTHIA . . . unsurpassed in lasting floweriness, strength and dollar value



ROSYNTHIA . . . a new Givaudan creation, offers tremendous value to the creative perfumer.

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Auto Specialties

(*From Page* 157)

bination might include a detergent and some effective solvent for the sludge and varnish, such as acetone.

K. *Gas Line (or Gas Tank) Anti-Freeze Compounds*

These are normally combinations of alcohols or a straight alcohol, such as denatured ethyl, methyl or isopropyl alcohol. Mineral solvents sometimes are blended, mainly as cheapening agents. Other solvents, such as orthodichlorobenzene, may be added to clean gum and varnish deposits, ostentatiously from fuel lines and carburetors. In percentages used, such solvents are rarely effective. New products making their appearance also contain an upper cylinder lubricant and are promoted as a dual purpose product. It may be assumed that such diversion of effort would weaken both efforts; i.e., the upper cylinder lubrication effect and the gas tank anti-freeze effect. One such product recently examined, however, showed good promise of realizing both objects. The "lubricants" in this case was one of a series of oxygenated hydrocarbons sold specifically for this purpose. Quantities used were in the recommended proportions as stated by the manufacturer of the basic material. The alcohol blend was also satisfactory for its avowed purpose. It is likely that we will see more of this type dual purpose product in the near future.

The basic premise for the regular gas tank anti-freeze is that the compound show a preferential solvent effect for water over that of gasoline, and that it further produce a practical anti-freeze mixture with any water in the tank. When used as directed, most of the compounds sold for this purpose are effective.

In conclusion, it must be noted that, by and large, the majority of chemical specialty products sold for automotive use are satisfactory for the purposes intended. This is no cause for complacency however. In many cases there is still room for substantial improvement. The "maintenance" chemicals especially, as distinguished from the "appearance" chemicals, could benefit much by applied research. Many specialty manufacturers are still not completely cognizant of the problems yet to be faced in the application of such maintenance products. It is true, also, that the problems themselves have changed radically in the past years, and will continue to change rapidly in the future.

It is important, therefore, that such manufacturers concentrate on the recognition of these factors, and produce products which will eliminate these advancing problems. I have no doubts but what the industry will continue to improve products, and thus will be able to constantly offer answers to most automotive chemical problems.

Insecticides for Resistant Flies

INSECTICIDES to control DDT/BHC resistant houseflies, the cacao moth, the flower beetle, and other pests and methods of application are the subject of the 1953 annual report recently announced by the British Pest Infestation Research Board.

Dusts containing a mixture of 0.1 percent pyrethrins and 1.6 percent piperonyl butoxide applied as a daily light dusting were found to be the most effective treatment against houseflies resistant to chlorinated hydrocarbons. A pyrethrum emulsion was found effective against flies wetted during the spraying operation, but the residual deposit lost toxicity so quickly as to be ineffective.

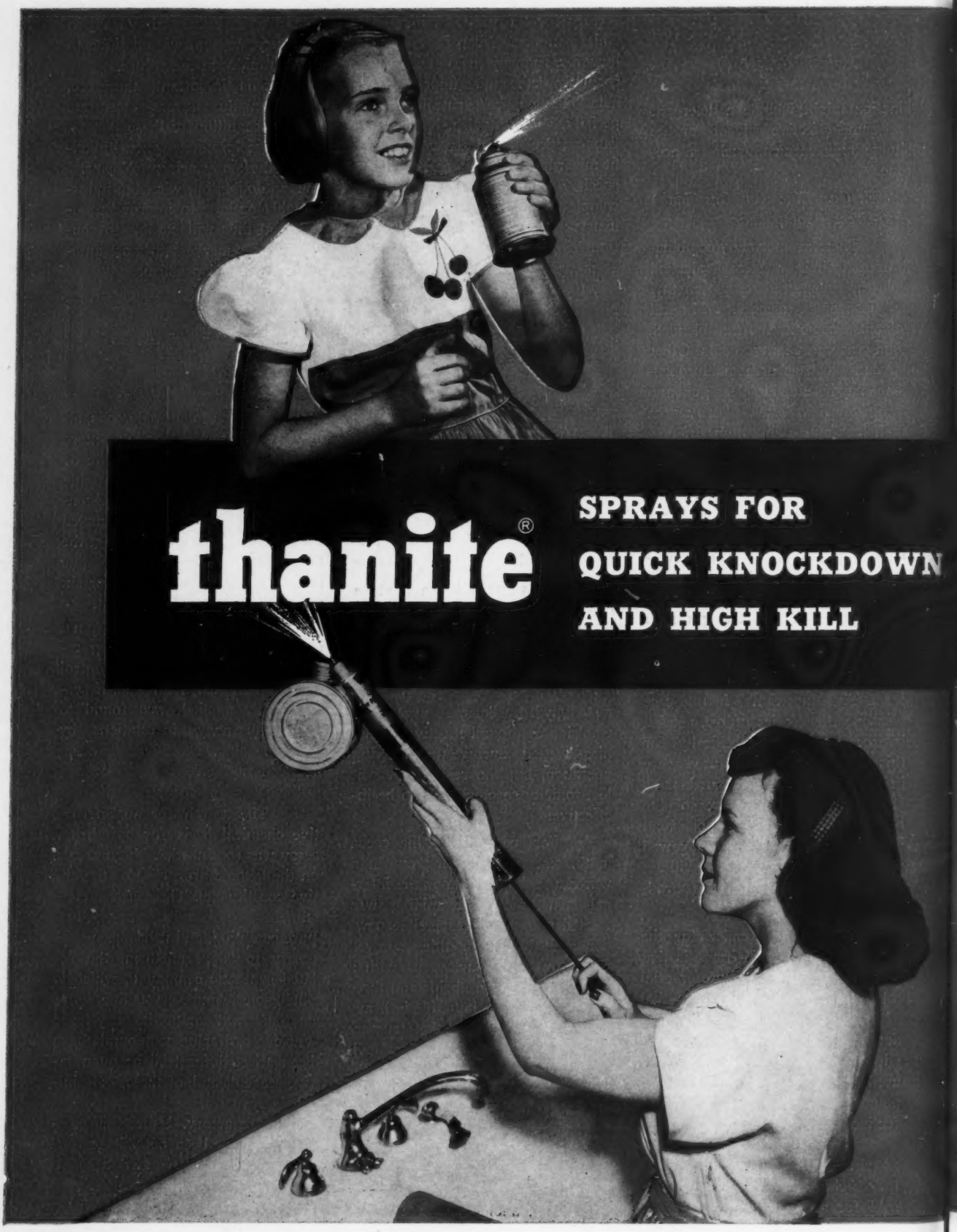
For control of the cocoa moth, tests were carried out in a warehouse. On one floor the internal structureof theb uilding was treated with DDT dispersible powder and the commodities sprayed every three to four weeks with a mixture of 0.3 pyrethrins and three percent piperonyl butoxide in heavy oil. On another floor the structure was not treated but the commodities were sprayed weekly with the pyrethrum/piperonyl butoxide mixture by means of a machine producing a heavy fog directed at the stored goods from a distance of three to 10 feet.

Both methods gave equally good protection to bagged goods, although the second method was more convenient to apply. A mixture of pyrethrins and piperonyl butoxide was used to impregnate bags containing cereals. The impregnated material gave protection against the flour beetle for a period of nine months if stored in the dark, or six months if exposed to daylight.

Paradichlorobenzene and naphthalene showed promising results in small-scale tests on control of clothes moths. Chlordane, if systematically applied, was found to control heavy infestations by pharaoh's ants. DDT was found to be much more effective than lindane in the control of cockroaches.

The search for an alternative chemical basis for pyrethrum assay was continued, with emphasis on the ketonic properties of the active constituents. These active constituents are difficult to isolate in a pure condition, and it has been necessary to adopt allethrin, the related synthetic compound, which is obtainable in pure crystalline form, as a standard for preliminary tests. Various hydrazine compounds have been selected for trial as quantitative reagents and, of these, 2:4-dinitrophenylhydrazine has proved the most satisfactory. Using this compound, it has been possible to estimate the allethrin content of commercial samples by gravimetric or

(*Turn to Page* 162)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QUICK KNOCKDOWN
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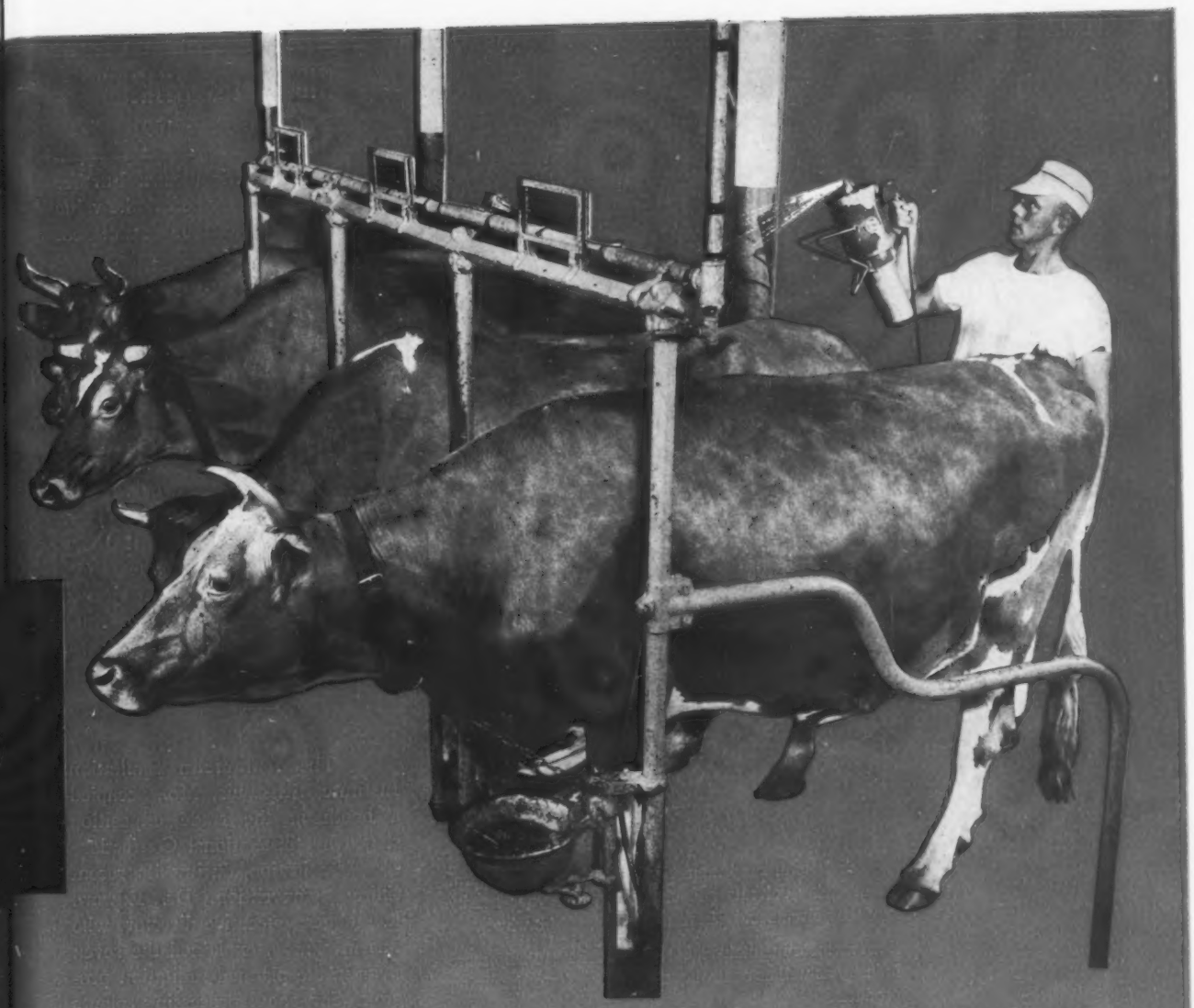

Put Thanite in your 1955 sprays and you'll give them good biological activity and lower your manufacturing costs. Thanite toxicant has no equal for downright economy in livestock, household, and aerosol formulations.

For household and aerosol sprays, Thanite helps give effective control of house flies, mosquitoes, silverfish, clothes moths, and other troublesome household pests. By using up to two per cent Thanite in household sprays, and one per cent in aerosols, you can partially replace much higher costing ingredients without sacrificing high biological activity.

In livestock sprays, the inclusion of even four per cent Thanite provides high knockdown and kill of house flies, horn flies, and stable flies.

Order Thanite for your 1955 formulations, now. Write for further details.

Naval Stores Department

HERCULES POWDER COMPANY

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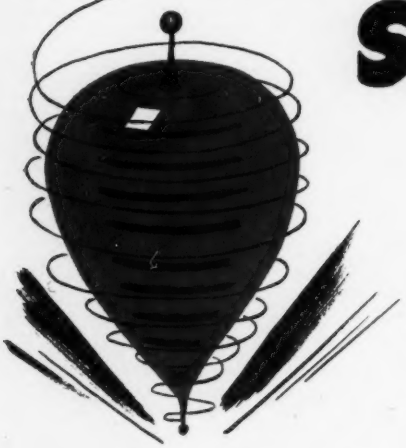

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INSECT RESISTANCE

(*From Page* 159)

spectrophotometric means. Further trails are necessary before the value of the method can be established.

When applied to purified pyrethrin concentrate, this method gave a value for total pyrethrins some 15 percent lower than that obtained by the mercury reduction method, the discrepancy being largely associated with the pyrethrin II fraction. It is not yet evident whether this discrepancy is due to some shortcoming of the new method, or whether the lower value represents a closer approach to the true content of the concentrate. A copy of the report is available from Her Majesty's Stationary Office, price two shillings. Through *Manufacturing Chemist,* June 1954, p. 266.

— ★ —

Sanitation Unit Program

The American Sanitation Institute, St. Louis, Mo., occupied a booth at the trade exposition staged by the National Confectioners Association, during its recent Chicago convention. Dr. Edward L. Holmes, executive director, who was in charge, explained the seven steps in the planned sanitation program for food processing plants offered by this organization. Food plant operators it was said recognize the need for insect and rodent control but too often leave this chore to the janitor, while failing to realize the importance of a complete and scientifically planned program to prevent or alleviate sanitation problems. In addition to planning and executing sanitation work the Institute also makes periodic "audits" or inspections, the Institute emphasizes. Displayed in the booth was a new compound, "Excelcide" malathion for residual spraying of food plant exteriors which, it is claimed, kills resistant and immune flies. "Excelcide" is manufactured by the Hugé Co., St. Louis, of which the American Sanitation Institute is a division.

stock emulsion. One wool sample was given the usual 10 minute treatment followed by three five minute rinses, while the second sample was removed and dried at the end of the 10 minute treatment. The DDT contents of the two samples were as shown in Table IV.

The difference is probably not significant, but in any case the sample which was not rinsed would be expected to have a slightly higher DDT content by virtue of the amount of residual emulsion which it retained. It is probable therefore that little or none of the DDT which is selectively adsorbed by the wool is removed by subsequent rinsing with water.

The low pick up observed when DDT was added in the sudsing operation must therefore be attributed to the action of the detergent in limiting the initial pick up of DDT and not to the subsequent removal of DDT during the rinsing operations.

In the work already described, quantities of emulsion sufficient to give about 0.7 percent DDT on the wool were used, and the exhaustion of DDT from the treating bath varied from about six to 69 percent depending on the method of application. However the higher exhaustions were obtained only when no detergent or non-ionic detergent was used. When soap was used as the detergent and the DDT was applied in the second rinse, the average exhaustion was of the order of 25-30 percent, giving approximately 0.2 percent DDT on the wool. This is considerably higher than is necessary for adequate protection of the wool against moth attack, it having been shown previously that 0.075 percent is sufficient for this purpose (4). Consequently, further tests were carried out in which the wool was given the usual 10 minute suds with 0.2 percent soap, followed by three five minute rinses with water, and DDT was added to the second rinse in an amount sufficient to provide 0.3 percent DDT on the wool at 100 percent exhaustion, or 0.075 percent at 25 percent exhaustion. Both DDT compounds were investigated. The results are given in Table V.

The higher pick up of DDT from Compound A as compared with Compound B is again demonstrated. The exhaustion of DDT from the treating bath was somewhat higher than had been estimated from the previous data, and it is probable therefore that adequate protection could be provided with still lower amount of DDT, particularly with Compound B.

It has been shown previously (5) that emulsions of oil stabilized with cationic emulsifiers exhaust readily on wool under certain conditions, but the wool must be essentially free of residues of anionic detergent. Apparently the same conditions apply to the use of the above compound since the manufacturers state that "the presence of residues of soap or other anionic products should be avoided." They also recommend that the final rinse be acidified with acetic acid, that the rinse be started cold and gradually raised to a temperature of 104-113°F during five to seven minutes. The process was tried out on a small scale and it was found that the DDT does exhaust onto the wool, as judged by the disappearance of the milkiness of the the treating liquor. However no chemical analyses were carried out, since it is believed that the exacting conditions necessary for the successful application of the method render it unsuitable for commercial laundry use.

Commercial Laundry-Scale Experiments

A COMMERCIAL scale trial of the process was next carried out. Wool blankets were washed in a 42 inch by 84 inch monel washer with the water level set at 10 inches (about 180 gallons). The washing formula consisted of two 10-minute suds with synthetic detergent No. 1 at an estimated concentration of about 0.2 percent followed by three three minute rinses with water, all at 98-100°F. After rinsing, the blankets were hydroextracted and dried by hanging. Since it was not feasible to remove samples for testing from the load itself, six test pieces of wool flannel measuring about 9 inches by 9 inches were included in the load, one being pinned to each of six blankets.

Since there were no facilities for weighing the total load, the DDT requirement was estimated from the number of blankets treated. This varied from 22 to 37 in the various loads treated. The average weight per blanket was taken as 3¾ pounds, based on the weights of 10 blankets selected at random and weighed on a small hand scale. The DDT concentrate, Compound B, was added to the second rinse in each case at the rate of 13.6 ml. per blanket. Assuming a 50 percent pick up of the DDT this was sufficient to provide 0.1 percent DDT on the wool.

In the first trial the DDT

TABLE V. Exhaustion of DDT on Wool from Dilute Emulsions

Compound A		Compound B	
DDT on Wool %	Exhaustion of Bath, %	DDT on Wool %	Exhaustion of Bath, %
0.14	44	0.10	33
0.15	48	0.11	36
0.16	51	0.11	36
0.16	51	0.12	39
0.15	49	0.11	36

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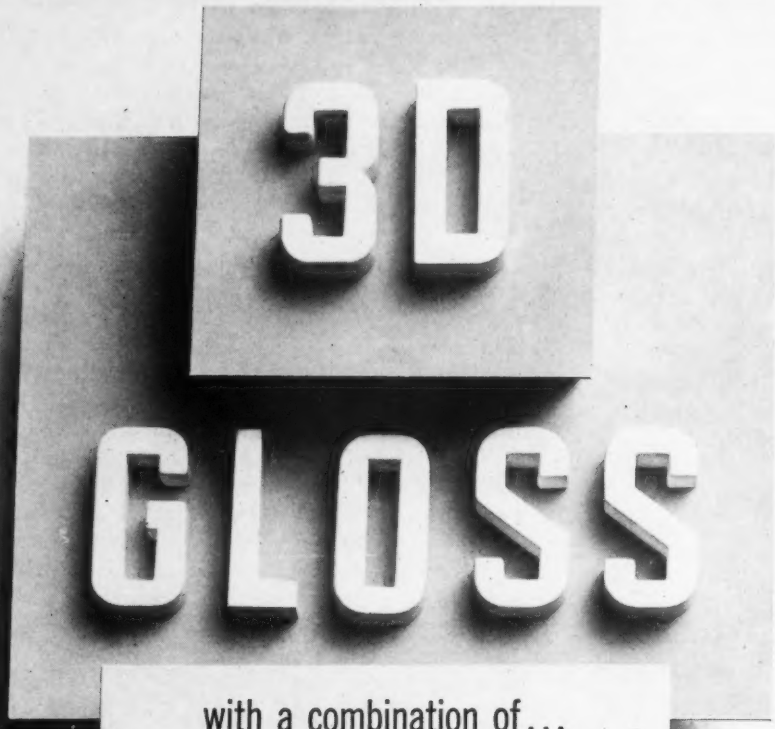

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concentrate was added directly to the wheel resulting in a very irregular pick up of the DDT, only three of the six test pieces receiving sufficient DDT to provide adequate protection against moth attack (see Table VI). In the remaining three trials the DDT concentrate was measured out and transferred to a pail containing three to four gallons of water. The mixture was stirred thoroughly to emulsify the DDT before it was added to the wheel.

The resistance to moth attack of the test pieces from each of the four loads was determined according to Method No. 38, "Resistance to Insect Pests," of the Schedule of Methods of Testing Textiles, No. 4-GP-2 of the Canadian Government Specifications Board. This method is essentially the same as the ASTM's Weight Loss Procedure carrying the designation D 582-49T.(6). The results are given in Table VI.

The criterion for satisfactory protection of the wool was that, in the absence of visual damage, the average loss in weight due to feeding was not more than eight mg., provided that under the same conditions the average loss in weight of the control specimens was not less than 30 mg.

It is therefore apparent that loads No. 2, 3 and 4, in which the DDT was emulsified prior to addition to the wheel, received sufficient DDT to provide adequate protection against moth attack, and

TABLE VI. Resistance to Moth Attack of Wool Treated with Compound B on a Commercial Laundry Scale

Load No.	Test Piece No.	Average Loss in Weight due to Insect Feeding mg.	No. of Larvae Living at end of Test*	Visual Rating (see key below)
1	1	0.2	10, 10	1, 1
(DDT concentrate	2	27.1	10, 10	5, 5
added directly	3	0	10, 10	1, 1
to wheel)	4	0	10, 10	1, 1
	5	20.8	10, 10	2. 5
	6	26.3	10, 10	5, 5
Control (untreated)	—	62.1	10, 10	5, 5
2	1	3.4	10, 10, 10, 10	2, 1, 1, 1
(DDT emulsified	2	0.5	10, 9, 10, 9	1, 1, 1, 1
with water before	3	3.9	10, 10, 10, 10	3, 1, 1, 1
adding to wheel)	4	0.8	10, 10, 10, 10	1, 1, 1, 1
	5	1.7	10, 10, 10, 10	1, 1, 1, 1
	6	1.0	10, 10, 10, 10	1, 1, 1, 1
		Av.=1.9		
3	1	0.6	9, 10, 10, 8	1, 1, 1, 1
(DDT emulsified	2	(Test piece was not returned from laundry)		
before adding	3	0.2	10, 10, 9, 10	1, 1, 1, 1
to wheel)	4	1.6	10, 10, 10, 10	1, 1, 1, 2
	5	0.7	10, 10, 10, 10	1, 1, 1, 1
	6	0.2	10, 10, 10, 10	1, 1, 1, 1
		Av.=0.7		
4	1	1.8	10, 10, 10, 10	1, 1, 1, 1
(DDT emulsified	2	0	10, 9, 9, 8	1, 1, 1, 1
before adding	3	0	10, 8, 8, 9	1, 1, 1, 1
to wheel)	4	0.4	10, 10, 10 **	1, 1, 1 **
	5	0	10, 9, 10 **	1, 1, 1 **
	6	0	10, 9, 10, 10	1, 1, 1, 1
		Av.=0.4		
Control (untreated)	—	67.2	10, 10, 10, 10	5, 5, 5, 5

* Two specimens were cut from each test piece of load No. 1, while 4 specimens were taken from each test piece from the remaining loads.
** Three specimens only used for these tests.
Key to Visual Rating (Ref. 7)
1. No visible damage—No visible damage to nap or surface fibres as shown by careful visual examination. A few cut fibres may be present on the floor of the cage.
2. No appreciable damage—Visible damage to nap or surface fibres revealed only by careful examination. Moderate amount of cut fibre on floor of cage.
3. Slight damage—Damage to nap or surface fibres realily visible, but not extensive.
4. Moderate damage—Extensive damage to nap or surface fibres.
5. Severe damage—Extensive damage to nap or surface fibres with one or more yarns cut.

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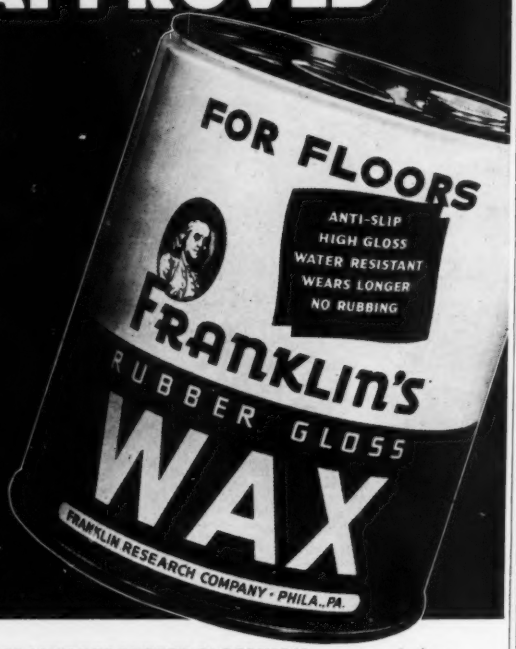

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that the distribution of DDT throughout each load was comparatively uniform.

Conclusions

THE following conclusions may be drawn from the foregoing experimental work:

1. When wool was treated with dilute aqueous emulsions of DDT there was a selective pick up of the DDT from the bath, the amount of DDT retained being much greater than that which could be accounted for by the amount of bath liquor remaining in the wool. It is not known whether this is due to physical adsorption of the DDT, or whether the comparatively large oil drops of the emulsion are merely filtered out by the woolen fabric.
2. The pick up of DDT was comparatively rapid, taking place largely within the first five minutes of treatment time. Compound B DDT exhausted more rapidly than Compound A, so that for a short treatment time the total take up of the B product was considerably greater than that of the A. With longer times of treatment (up to 40 minutes) there was less difference between the exhaustions of the two products. It is probable that satisfactory results can be obtained with either product, a slightly higher initial concentration of DDT, or a longer treating time, possibly being required for Compound A. It is, of course, obviously desirable to keep the length of the treatment to a minimum to avoid danger of felting.
3. The presence of detergent in the treating bath interfered with the take up of DDT. It is probable that deposition of DDT onto the wool and its removal due to the action of the detergent take place simultaneously and hence the more efficient the detergent the less DDT is retained by the wool. For this reason it is preferable to add the DDT after the bulk of the detergent has been removed by rinsing. The free rinsing characteristics of nonionic detergents render these products particularly suitable for the laundering of wool prior to the DDT treatment.
4. The DDT on treated wool was readily removed by subsequent washing with detergent, and consequently there was no build-up of DDT on repeated treatment. The DDT was not removed by rinsing with water only.
5. When DDT was applied in the second rinse, following a washing with soap, in an amount sufficient to provide 0.3 percent on the weight of the wool (about 5½ gm. concentrate per pound of wool), 49 percent of Compound B and 36 percent of Compound A were exhausted from the bath resulting in a DDT content on the wool of 0.15 percent and 0.11 percent respectively.
6. When the method was carried out in full scale laundry equipment using Compound B, in an amount equal to 0.8 percent of the load weight (3.63 ml. of concentrate per pound of wool or 13.6 ml. for each 3¾ pound blanket), adequate protection of the wool against moth attack was provided. The cost of Compound B for this treatment (at $2.40 per gallon of concentrate) is 0.19 cents per pound of wool or about ¾ of a cent for an average sized blanket. It is essential that the DDT be emulsified in water prior to its addition to the wash wheel, and when this was done the DDT was found to be uniformly distributed throughout the load.
7. It is unlikely that DDT products stabilized with cationic emulsifying agents would be feasible for commercial laundry application.

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Polymers in Wax

(*From Page* 147)

What had been gained by using the polymer? First, the gloss was somewhat better in the polymer formula. It gave a reading of 15 on the Glossmeter against 11 for the wax. Second, the slip resistance was a little better, 0.74 against 0.70. The slip resistance improved here where it didn't in the first comparison because the wax was harder. Third, so far as could be tested, all the good qualities of the carnauba were maintained or improved, while at the same time, the cost of the formula was lowered. In other words, in high carnauba wax formulations, the polymer latices can function as extenders without detracting from the performance, something that cannot be done with regular polymers.

The use of polymer latices is much broader than implied by the two examples. It has been successfully used in formulas containing several types of waxes, both natural and synthetic. It blends well with nearly all the usual resins and gums. In short, its excellent compatibility permits it to be used in

Table VI. Self-Polishing Waxes with and without Polymer.

	A	B
Wax emulsion	85 lbs.	68 lbs.
Loba DBB		
Gum Solution	15 lbs.	12 lbs.
Ubatol U-2001	—	20 lbs.
	100 lbs.	100 lbs.

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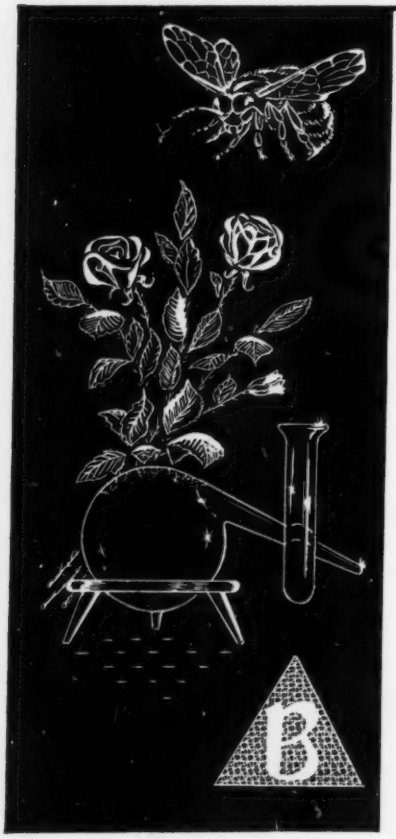

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many different types of water-emulsion type formulations.

Study is still required on buffing of polymer formulations. So far, we have not been able to make a 100 per cent polymer or polymer-resin formulation that is buffable. As soon as less than 15-20 per cent of wax is used, the film cannot be buffed. "Ubatol U-2001" films will dry to a high gloss and do have some application. If, however, buffing could be accomplished without wax, the use of such formulations would grow rapidly. For one thing, these formulations would have excellent slip-resistance.

Summarizing briefly, polymer latices in the past have found limited use in water emulsion floor finishes primarily because of their dispersion system. A polymer latex with a proper system has been described and two specific applications cited. On the basis of these tests, it has been shown that a polystyrene-type latex can contribute toughness and durability to floor finishes and, at the same time, maintain all other desirable characteristics.

Formula

(From Page 48)

Fried believes.

Present training calls for weekly meetings to discuss new products, new approaches to sales problems and suggestions for the solution of new problems. The vice-presidents in charge of sales, William Fried and Harold Lefcourt, vice-president in charge of dealer sales, are responsible for training of salesmen. They work with the new men, as do the other members of the sales staff. One phase of this training consists in doing certain maintenance jobs for customers in order to give the new salesmen training. Not only do the new men require instruction and training, but the older men, as well, need brushing up and sales hints, from time to time.

The major portion of Formula's advertising program is represented in its catalog. The value of the catalog in the eyes of Formula executives is that it stays on the buyer's desk. Formula's catalog is designed with this in mind, so that it is sufficiently distinctive not to be mistaken for another type of publication.

Other Formula advertising and promotion is done via the *Maintainer*, which is packed full of stories on the maintenance operations of its customers, with hints on selling, etc. Lines sold by Formula are advertised periodically in the *Maintainer*.

Formula's new 240-page illustrated catalog has just come out. It has been die cut in the shape of a drum. The opening page of this new catalog contains these lines. "Cleanliness and sanitation are purchaseable conditions. They are bought just as heat and light are bought. They are a combination of man power, equipment and supplies." The Formula formula is dig out and offer the right combination of these substances in solving cleaning problems. How well they are doing just this, is indicated by a compounded annual sales increase of better than twenty-five percent since 1945.

— * —

Aerosol Paint Remover

"Freon-12" dichlorodifluoromethane is recommended as the propellent in new aerosol paint remover formulations. Dispensing pressures of 25-32 pounds per square inch gage at 70°F., obtained by using about 25 per cent propellent by weight, produce a fairly wet, residual-type spray which experiments indicate is most effective.

Complete information about paint remover formulations for aerosol packaging are outlined in a new technical bulletin, KTM-16, of Kinetic Chemical Div. of du Pont.

Another new development is the recent commercial introduction of an industrial powder spray for use in the plastics industry and successful laboratory fomulation of many other types of aerosol powders, according to Kinetic Chemicals. The new powder spray is a dry zinc stearate mold release product.

— * —

New Insecticide Standard

The recommended revision of Household Insecticide (Liquid Spray Type), Commercial Standard CS72-38, approved by a standing committee of the Office of Technical Service of the U. S. Department of Commerce, becomes effective Sept. 25. The revision was circulated to the trade under date of May 25, 1954, and since that time signed acceptances have been received from a number of manufacturers, distributors and users, estimated to represent a satisfactory majority, according to F. W. Reynolds, assistant chief of the Commodity Standards Division. The revision is identified as Household Insecticides, (Liquid Space Spray Type for Flying Insects) (Second Edition), Commercial Standard CS72-54.

When printed copies become available for purchase from the Superintendent of Documents, a public announcement will be made. In the meantime, the Recommended Revision, TS-5214, circulated for acceptance on May 21, 1954, may be used.

— * —

Powell Export Unit Moves

The export activities of John Powell & Co., New York, were moved Sept. 3, from One Park Ave. to 745 Fifth Ave., headquarters office of the Squibb-Mathieson Overseas Division of Mathieson Chemical Corp., Baltimore. This was announced recently by William J. Pollert, executive vice-president of Powell, which is a division of Mathieson.

Personnel remains the same with C. J. Frederickson as manager, A. E. Collazo, export sales manager, and the remainder of the staff unchanged. The move involves John Powell Export Corp. and the Overseas Division of John Powell & Co., consolidating in one office all the overseas sales activities of the two Powell and the Squibb-Mathieson Overseas Divisions.

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News

Dr. Starr Leaves Penick

Dr. Donald F. Starr, chief chemist of the insecticide department of S. B. Penick & Co., New

Donald F. Starr

York, resigned from the position effective Sept. 1. Mr. Starr had been with Penick for the past nine years. Prior to that he was connected with the Bureau of Entomology & Plant Quarantine of the U. S. Department of Agriculture for 10 years serving in Honolulu, Mexico City, and Beltsville, Md.

Dr. Starr is setting up a consulting business at 256 N. Mountain Ave., Montclair, N. J. He is specializing in insecticides, rodenticides and fish control.

He received his Ph.D. and master's degree from Iowa State University and his B.S. degree from Grand Island (Nebr.) College.

Dr. Starr was active in the affairs of the Chemical Specialties Manufacturers Association and in 1953 served as the chairman of the insecticide scentific committee of the association.

—★—

CSMA Moves Oct. 1

The Chemical Specialties Manufacturers Association is expected to move to its new quarters on the 10th floor of the Chemists' Building, 50 E. 41st St., New York City, around Oct. 1. The Association continues in its present quarters at 110 E. 42nd St. until renovation and redecoration at the new address are completed. Further notice of the moving date, new address and new telephone number will be sent out prior to moving. The new quarters which houses the Chemists' Club will provide larger floor area and better working arrangements, according to H. W. Hamilton, C.S.M.A. secretary.

—★—

McCormick Advt. Manager

The appointment of Charles F. Mattern as advertising manager for McCormick & Co., Baltimore, was announced recently by Charles P. McCormick, president and chairman of the board. Mr. Mattern succeeds Keene A. Roadman, who has been made manager of marketing and research.

—★—

Johnson Advances Grant

Edward G. Grant, New York district manager of maintenance products, was recently named national accounts manager for maintenance products of S. C. Johnson & Son, Inc., Racine, Wis. At the same time it was announced by R. W. Carlson, marketing vice-president of the company, that Raymond W. Schimming has been named to succeed Mr. Grant as New York district manager of maintenance products.

Mr. Grant, who is making his headquarters at Johnson's head offices in Racine, has been with the firm for 17 years. He has held sales positions in the company's district offices in Pittsburgh and New York.

Edward G. Grant

Mr. Schimming joined S. C. Johnson & Son, Inc., in 1941. He

Raymond W. Schimming

has held various sales positions and prior to his recent advancement was industrial products sales supervisor in Cleveland.

—★—

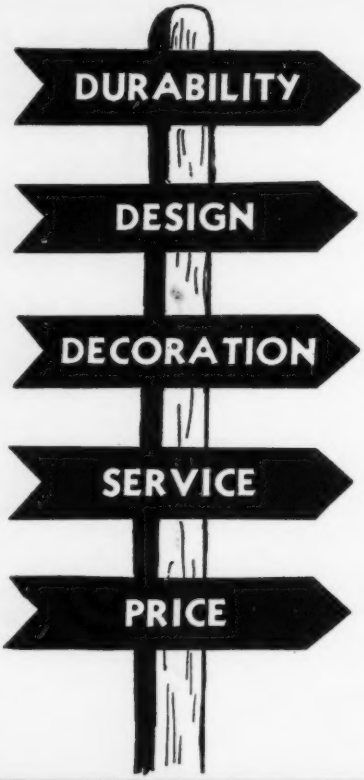
Damon Sales Manager

J. L. Damon has recently been appointed sales manager of the Agricultural Chemical Department of the General Chemical Division of the Allied Chemical and Dye Corp., New York. Mr. Damon was formerly in charge of sales of the reagent and fine chemicals department for General. He succeeded John Kirk who previously had resigned to become director of sales for the Velsicol Corp., Chicago.

—★—

No Wax Trade Rules

Termination of the trade practice conference proceedings for the floor wax and floor polish industry without the promulgation of rules was announced by the Federal Trade Commission, Washington, D. C., Aug. 13. Notice that the F.T.C. was dropping the idea of trade practice rules for the floor wax and floor polish industry, after five years of industry meetings and conferences, was announced in a letter from Robert M. Parish, sec-



Eastern's superior workmanship guarantees strong, durable containers that will take your product safely to market.

Eastern's experts can be of major assistance in designing packages that win sales success.

Eastern is noted for top-quality lithography on every shipment.

No costly interruptions with Eastern's service — shipments arrive when and where you specify.

Eastern's advantages available at competitive prices because of our modern plant and long experience.

All Signs Point to EASTERN *for Distinctive* PACKAGING

Start on the road to a distinctive package for your waxes, cleaners, polishes and other specialties by calling in Eastern. Plain or lithographed — a package by Eastern guarantees satisfaction for both you and the consumer.

Further details available without obligation

W N S

EASTERN CAN CO., INC.

31 Keap St., Brooklyn 11, N. Y.

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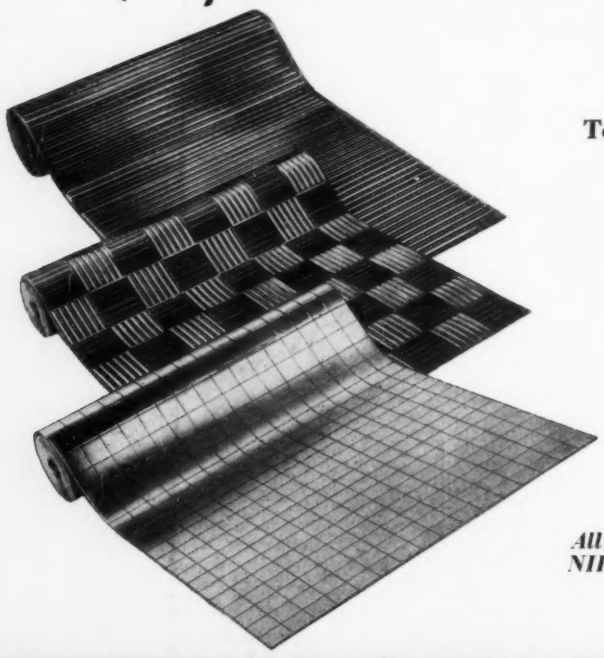
Perfection in Rubber Floor Matting

means...



To gather dirt and keep it from spreading

Result is
A cleaner place with more customers

Use
Wear Proof's 51 years' experience
for quality

Wear Proof Mats pictured are:
Top: Cross-Rib Runner
Center: Shad-O-Rug
Bottom: Tile Runner

All styles available in Black, Red and Green. NIRU grease and chemical proof in Grey and White only.

Write for information

WEAR PROOF MAT CO. 2156 W. FULTON CHICAGO 12, ILLINOIS

retary of the F.T.C.. The letter follows:

"This is to advise you that the Commission, upon consideration of the record therein, directed that the trade practice conference proceedings for the Floor Wax and Floor Polish Industry be terminated without the promulgation of rules."

—★—

Continental Managers

The appointment of plant managers of three of its metal can factories was announced recently by Continental Can Co., New York.

Stanley M. Bixler has been appointed manager of Continental's Harvey, La., metal can plant; Thomas G. Simota, formerly assistant plant manager, has been named manager of the Milwaukee plant, and Clarence Y. Robinson has been chosen manager of the Continental metal can plant in Denver.

—★—

Roche to Hollingshead

The appointment of Maurice F. Roche as western regional manager of its automotive sales division was announced recently by Raymond LeKashman, manager of the automotive division of R. M. Hollingshead Corp., Camden, N. J. Mr. Roche, who is to have complete charge of sales of the automotive division in the 10 western states, will make his headquarters at Hollingshead's new million dollar chemical plant at Sunnyvale, near San Francisco, when that plant is completed and placed in operation next year. In the meantime he is making his temporary headquarters in the San Francisco area.

During the past four years Mr. Roche was associated with Balfour Guthrie & Co., importers, and prior to that was assistant sales manager of Sunset Supply and Paper Co., San Francisco.

Mr. Roche attended Los Angeles City College and the University of California. He served as a pilot in the U. S. Air Force during World War II, leaving the service in 1945 with the rank of Second Lieutenant.

FMC Sets Up Fairfield Chemical Division

FAIRFIELD Chemical Division of Food Machinery and Chemical Corp., New York, began operations Sept. 1, following earlier announcement of its creation by Ernest M. Hart, executive vice-president in charge of chemical operations of FMC. The newly created division embraces the insecticide chemical business and related production and laboratory facilities recently acquired by Food Machinery from U. S. Industrial Chemicals Co., division of National Distillers Products Corp., New York.

The new Fairfield division, with headquarters at 420 Lexington Ave., New York, continues to manufacture the products and maintain the policies, established by U. S. Industrial Chemicals. The new unit is concentrating initially on pyrethrum, Pyrenone, allethrin and related products. Activities in the herbicide field will be intensified, and ample research and production facilities will be available for broad expansion toward the development of other products, according to Mr. Hart.

To be operated as a separate unit, with the plant and laboratory facilities being located in the Fairfield industrial section of Baltimore, the Fairfield Chemical Division will supplement, not parallel, the other chemical activities of Food Machinery, which include the Westvaco, Chlor-Akali, Westvaco Mineral Products, Ohio Apex, Niagara Chemical and Buffalo Electro Chemical Divisions, Mr. Hart said.

Fairfield Chemical Division will not enter the field of consumer products, but will serve as suppliers of raw materials and basic concentrates to manufacturers of insecticides and related products, in accordance with previous policy.

Management of the Fairfield Division will be under the direction of personnel previously associated with the insecticide division of USI. Russell B. Stoddard, who served as coordinator of insecticide operations for USI, becomes manager of the division, with offices at the administrative and sales offices at 420 Lexington Ave., New York. W. S. Blondheim, plant manager of the Fairfield plant in Baltimore will be in charge of operations other than sales and research. Dr. Herman Wachs has been named director of research, with headquarters in the Baltimore laboratories.

Other USI personnel retained by the Fairfield Chemical Division include Dr. Walter E. Dove, director of entomological research, and Howard Jones, director of USI laboratories. Other members of the research staff continue in the same capacities they have had with USI.

John A. Rodda is sales manager of the Fairfield Chemical Division, with headquarters in New York. Branch offices of the new di-

Russell B. Stoddard

John A. Rodda

vision are being established in Chicago, Kansas City, New Orleans, San Francisco and other strategic points, and arrangements are being made to carry warehouse stocks at points geographically suited to expedite delivery.

—★—

A. P. Natenberg Dies

Arnold P. Natenberg, partner and founder of Kurly Kate Corp., Chicago metal sponge producers, died Aug. 2.

New Pennsalt Cleaner

A new type liquid cleaner for use by milk producers and dairy plant operators is now being marketed by Pennsylvania Salt Manufacturing Co., Philadelphia. The recommended use concentration of the new cleaner, designated "Bry-Ko," is one tablespoonful in three gallons of water. The product is claimed to be formulated specifically for use around milking machines.

The addition to the staff of the company's corrosion engineering department of Michael Kuzma, a specialist in marketing, was announced at about the same time by Pennsalt. In his new capacity as staff assistant to Robert R. Pierce, sales manager, he is concerned with marketing programs of the company's line of corrosion engineering products including "NeoFloor" skid-proof floor coatings.

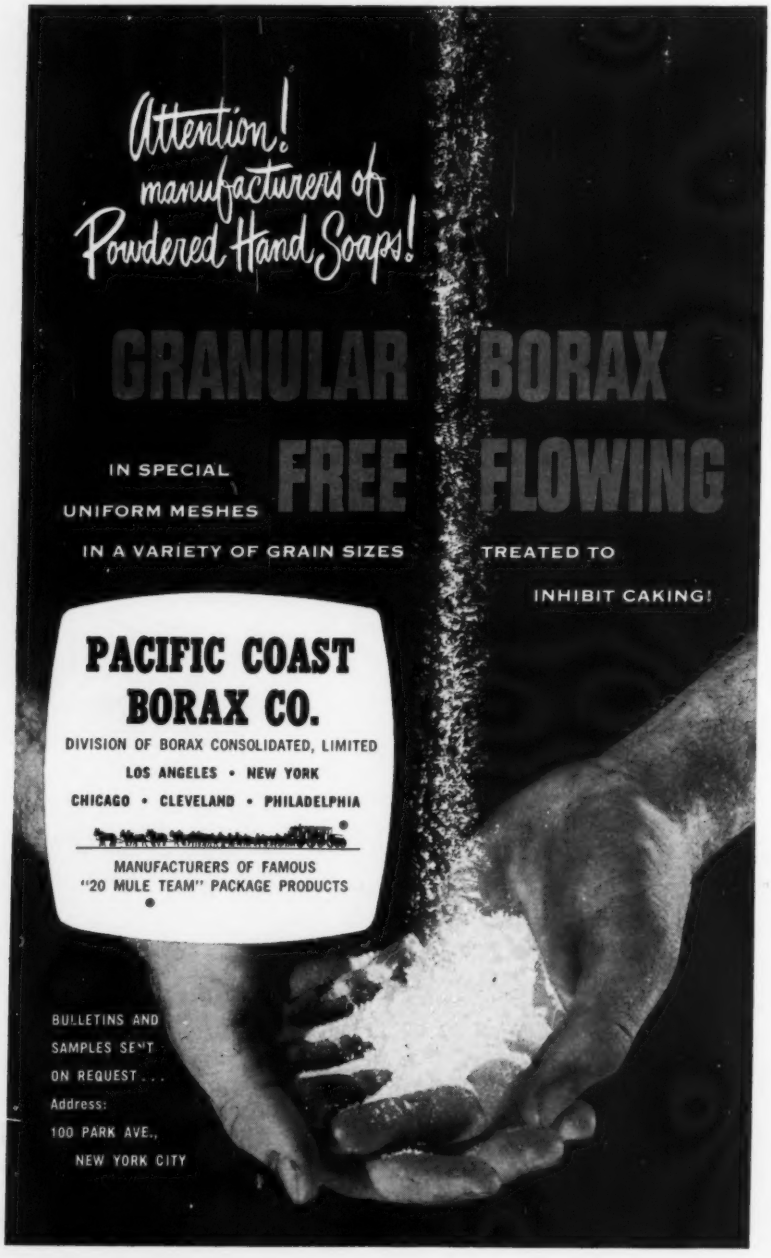
—★—

Warwick Names Gower

The appointment of Albert W. Gower as general sales manager of Warwick Chemical Co., division of Sun Chemical Corp., Long Island City, N.Y., was announced late last month. Mr. Gower, who is a chemist by training, has been engaged in technical sales management activities in such diversified fields as adhesives, paints, petroleum, plastics, etc. For the past 10 years he has handled various sales functions in the industrial chemicals division of American Cyanamid Co., New York. Prior to joining American Cyanamid, he was manager of technical sales and market development of the chemical division of Connecticut Hard Rubber Co.

In his new position, Mr. Gower is directing sales activities of each of Warwick's products groups comprising complete lines of industrial surfactants, metallic soaps, textile chemicals, pigments printing colors, plastic dispersions, etc.

Albert W. Gower



New Sanitary Supply Dept.

Hudson Falls Paper Corp., Hudson Falls, N. Y., has opened a new sanitary supply division and will handle a full line of janitorial supplies and equipment. Montgomery W. Chapman is sales manager of the new department. The company is located at 270 Main St., Hudson Falls, N. Y.

—★—

New Superior Rubber Plant

Superior Rubber Manufacturing Co., Chicago, recently announced it had completed its new office, factory and warehouse building at 501 W. 82nd St., Chicago 20. The company moved into the new building Sept. 1, according to announcement by Charles J. Wood, president.

—★—

In Velsicol Post

J. P. Middleton, formerly production superintendent of the firm's insecticide manufacturing operations, was recently appointed administrative assistant at the Memphis plant of Velsicol Corp., Chicago. His new duties call for him to assist in coordinating the various activities of the Memphis plant. A native of Harrison, Ark., Mr. Middleton attended Arkansas State Teachers' College, East Texas State College and took degrees in chemistry and chemical engineering from the University of Arkansas. Before joining Velsicol, he was with Delta Products Co., Wilson, Ark., where he was in charge of refining and hydrogenation of vegetable oils.

J. R. Middleton

—★—

PICCO Names Rice

The appointment of Rice & Co., Cleveland, as its representative in that city was announced recently by Pennsylvania Industrial Chemical Corp., Clairton, Pa. Rice & Co. operates under the newly created Detroit office of Pennsylvania Industrial Chemical Corp. in the Guardian Building.

NSSA Board Meets

A two day meeting of central regional members of the National Sanitary Supply Association was held Sept. 9 and 10 at the Neil House, Columbus, O. The board of the directors of the N.S.S.A. held their quarterly meeting in Columbus in conjunction with the regional meeting. William Hubman of Hubman Supply Co. was in charge of reservations for the meeting.

VULCAN Pails and Drums Insure Fullest Measure of Quality and Service

Your pail and drum needs can be solved quickly and easily by Vulcan Steel Container Company.

Leading chemical manufacturers and processors throughout the South depend upon Vulcan for:

- **QUALITY PAILS AND DRUMS in a wide range of sizes and styles (1 to 8 gallons), fully complying with all standard specifications.**
- **RELIABLE SOURCE OF SUPPLY (Vulcan's production lines are geared to turn out any order — large or small).**
- **FAST PERSONALIZED SERVICE (Your order receives quick, accurate attention).**

Both Open Head Lug-Cover Pails and Closed Head Drum type are available, furnished with plain cover, or with any of the popular pouring openings.

In addition to all regular linings, Vulcan produces Hi-Baked Interior Linings and those famous special linings for "hard-to-hold" chemicals.

Vulcan Pails and Drums can be finished with colorful lithographed trade marks and designs forcefully reproduced.

● **Samples and prices gladly furnished**

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BIRMINGHAM ● ALABAMA

Thousands of Maintenance Managers
use AMERICAN STANDARD man-sized wet-mops, sweep mops and applicators exclusively. The nation's most successful distributors regularly supply those thousands of AMERICAN STANDARD enthusiasts.

for both ROUGH and smooth floors

For years the VICTORY Wet Mop has been our biggest seller. Thousands of maintenance men use VICTORY wet mops exclusively! Heavy-duty, quality yarn . . Your best bet, if you want a mop of extraordinary durability, performance and economy.

"BIG X" SWEEP MOP

This sweep mop is our leader. Snatches up dust on contact. It's nationally famous. A durable giant—available in widths up to 5 feet! Can be removed from the block for washing Once you try BIG X, you'll use no other.

HOLZ-EM APPLICATOR

You'll enjoy the fast, thorough performance of this luxurious, high-speed applicator. Reduces cost of applying wax, seals, varnish, etc. More professional floor finishers use HOLZ-EM than any other applicator

Jobbers

Complete catalog of our nationally-advertised mops, applicators, dusters, mitts, and custom-made items, on request.

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AMERICAN STANDARD MFG. COMPANY
Incorporated 1908
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NAMICO
T.M. REG. U.S. PAT. OFF.

57 Years of Research and Manufacturing Experience Assure Superior Quality and Service . . .

•

NAMICO "444"

A Newly-Formulated All-purpose Liquid Cleaner and Sanitizer

"444" is an outstanding new NAMICO development – a highly effective germ-killing disinfectant and surface cleaner for floors, woodwork and walls. Only 2 ounces of "444" to each gallon of water (¾ cup to a 12-gallon pail) will efficiently accomplish these results:

- It reaches and destroys bacteria most cleaners can't touch.
- "444" stops decay, eliminating the source of foul odors.
- It actually removes odors, not masks them.
- "444" eliminates film and dullness caused by ordinary cleaners.
- It keeps mops and cleaning implements in a clean, sanitary condition.
- "444" has a strong colloidal action that keeps dirt in solution until rinsed and removed. It has no artificial odor.

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You'll want samples and further information on Namico "444". Write us today.

SNAP!

The new controlled-action detergent that snaps out dirt and grease. Puts new speed, economy and efficiency into home and commercial laundering. Ideal for all fabrics, even baby clothes. Effective for all-'round household use.

Samples and full details upon request.

NATIONAL MILLING & CHEMICAL CO.
Philadelphia 27, Pa.
Manufacturers Since 1896

C. U. Elects Molnar

Nicholas M. Molnar, head of Molnar Laboratories and president of fine Organics, Inc., New York,

Nicholas M. Molar

has been elected president of the Cooper Union Alumni Association, New York, it was announced last last month.

A 1926 graduate of the Cooper Union School of Engineering, Mr. Molnar holds a number of important patents in the field of organic chemistry. He is a member and a past president of the Association of Consulting Chemists and Chemical Engineers, a fellow of the American Institute of Chemists, and a member of the American Chemical Society, the New York Academy of Sciences, the Chemists' Club, American Public Health Association and the New York Board of Trade.

—★—

New Pennsalt Plants

Pennsylvania Salt Manufacturing Co., Philadelphia, announced recently that it would build two new plants. One will be located at Delaware, O., and the other at Chicago Heights, Ill. The plants are to serve as primary regional blending, packaging and warehousing and distribution centers. They will handle cleansing and sanitizing agents for the food industries, farm and homes; laundry and dry cleaning chemicals; metal cleaners, castings and special lubricants for the metal industries, and maintenance chemicals. "Lewis Lye," Pennsalt's oldests product, will be among the products packaged at the Chicago Heights plant. Construction of the plants will be completed this year.

—★—

Parchoise Joins Tombarel

Pierre Parchoise, formerly with E. I. du Pont de Nemours & Co., Wilmington, Del., and Coty, Inc., New York, has joined the staff of Tombarel Products Corp., New York, as chief perfumer, according to a recent announcement by Dr. P. Muhlethaler.

Powell Sells "Fly Flakes"

The appointment of John Powell & Co., New York, a division of Mathieson Chemical Corp., Baltimore, as national sales agents for "Fly Flakes," new flake form insecticide, was announced recently by Florida Agricultural Supply Co., division of Wilson Toomer Fertilizer Co., Jacksonville, Fla. Sales in all states except for a half dozen in the southeast are being handled by Powell. Those in the southeast

WAXES

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Crude - Refined - Bleached - Flaked - Powdered
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MAMARONECK REFINED BRAND
Vegetable Waxes
CERESINS - OZOKERITES
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Cerita
INDUSTRIAL WAXES
Compounds and blends made to your specifications

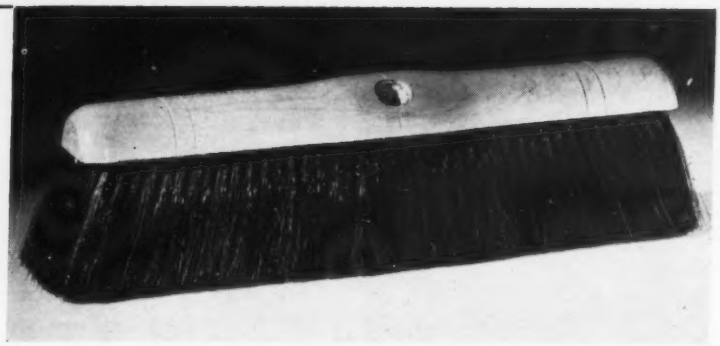
M. ARGÜESO & CO. INC.
442 Waverly Avenue, Mamaroneck, N. Y.
Mamaroneck 9-4746 • Cable MARGUESO
Refinery: Mamaroneck Chemical Div., Mamaroneck, N.Y.

CERITA WAXES

M. ARGÜESO & CO. INC.
Established 1908

A CLEAN SWEEP

with Moran's "The Institution"



"The Institution" is the perfect brush for clean sweeping on the finest of surfaces. It is ideal for use in schools, hotels, hospitals and other institutions.

- 50% Dupont Nylon
- 50% Grey Horsehair
- 3¼" Bristle Length
- Staple Set
- Honey Maple Lacquered Hardwood Blocks and Handles
- Metal Handles Available

MORAN BRUSH MFG. CO., INC.

30 Manila Avenue — Hamden, Conn.

Quality Brushes Since 1869

Sales Offices & Warehouses: 1323 Wall Street, Dallas — 2707 Detroit Ave., Cleveland — 4350 So. Wolcott Ave., Chicago 9, Ill.

EXTRA!! LABOR COSTS HIT NEW HIGH!

Use this FACT to obtain new customers by selling them fabulous NON-SKUFF FLOOR WAX. When using this wax, the resulting high gloss eliminates the need for initial buffing. The resistance of this wax to scuffing and dirt retention cuts floor maintainance costs in half.

IT COSTS YOUR CUSTOMER MONEY NOT TO USE IT!

- EXTRA HIGH GLOSS
- SCUFF RESISTANT
- MIRACULOUS LEVELING PROPERTIES
- LOW DIRT RETENTION
- WATER AND SLIP RESISTANT
- LIGHT IN COLOR
- NOT HARMED BY FREEZING
- DOES NOT DARKEN, OXIDIZE OR POWDER

Uncle Sam's **NON-SKUFF** • ***FLOOR WAX***

WRITE FOR OUR DESCRIPTIVE CATALOGUE NO. 6 AND PRICE LIST

UNCLE SAM CHEMICAL CO., Inc.

575 WEST 131st ST. Est. 1920 NEW YORK 27, N. Y.

will be covered by Florida Agricultural Supply Co. Powell will also handle export sales of "Fly Flakes."

—★—

Dieldrin for Household Use

The use of dieldrin in household insecticides for control of roaches, ants, silverfish, ticks, carpet beetles, paper nest wasps and mud daubers was announced recently by R. C. McCurdy, president of Shell Chemical Corp., New York. Label acceptance for dieldrin's use as a spray or dust in household insect control was granted recently by the U. S. Department of Agriculture. The residual chlorinated hydrocarbon type insecticide previously had received label acceptance for use against a wide variety of insect pests in agriculture. More recently it has been found effective against lawn insects.

"This new acceptance is most important because it opens the way for dieldrin to become a small-package insecticide available on dealers shelves for everyone's use in home insect control," Mr. McCurdy said.

Dieldrin is sold by the Agricultural Chemicals Division, Shell Chemical Corp., to manufacturers and distributors of insecticides who use dieldrin in their own formulations and market it under their own trade names. The material is produced at the Shell plant in Denver, which was formerly that of Julius Hyman Co., prior to the acquisition of the latter company by Shell.

The most recent example of dieldrin's effectiveness came during the battle this summer against a severe attack of armyworms on a variety of crops in the midwest. Dieldrin was flown by Air National Guard planes from all parts of the country to help stop the destructive insects in the Minnesota-North Dakota-Wisconsin area.

In Florida last summer, a severe infestation of cinch bugs and related insects in lawns and other turf was controlled by the widespread use of dieldrin. Aldrin, a sister insecticide of dieldrin, played an important role in stopping locust plagues in the Middle East recently.

Bareco Names Skinner

The appointment of George W. Skinner as assistant to the vice-president of its microcrystalline

George W. Skinner

wax division was announced recently by B. H. Clary, vice-president of Bareco Oil Co. of Tulsa. Mr. Skinner succeeds James D. Frawley, who on Sept. 1 became vice-president of Frank Frawley Drilling Co. Mr. Skinner has been Chicago division sales manager of Bareco for the past three years. Previously he had been with Hudson Research Foundation, Inc., New York.

C. D. Murphy has been named to replace Mr. Skinner as Chicago divisional sales manager.

—★—

News Briefs

J. F. Kerns Co., Chicago, recently changed its name to Liquisan, Inc., 1620 Monroe St., Chicago 12.

Cottens Supply Co., 2050 Montgomery St., Oroville, Calif., recently changed its name to Commercial Supply Co., according to an announcement by Robert Pope.

In new and larger quarters is Wolfe Chemical and Supply Co., 529 N. Main St., Dayton 1, O.

Formula Floor Products, Inc., recently to new and larger quarters at 99 Frelinghuysen Ave., Newark 5, N. J., Jack Hirsch, president, announced recently.

L. H. Butcher Co. recently opened new offices and warehouse facilities at 407 W. 17th St., Salt Lake City, U.

Johnson Distributing Co. is now located in new and larger quarters at 217 Birch Ave., North Sacramento 15, Calif.

E. A. Thompson Co. is the new name of By-Chemical Products Co., 1355 Market St., San Francisco 3, Calif.

—★—

Germicidal Floor Wax

A floor wax that is claimed to combine germicidal properties was introduced for the household market through department stores and hardware stores recently for the first time by Trio Chemical Works, Inc., Brooklyn. The new product marks Trio's entry in the household chemical specialties field. Heretofore the firm has concentrated on private label specialties manufacturing.

The new germicidal water emulsion type wax bears the registered trade name "Amazon." Can label copy stresses non-rubbing and non-scuffing features. In addition the maker claims that the product is non-irritating to the hands, water-resistant, non-inflammable, slip-resistant, harmless to humans and pets.

"Amazon" is packaged in pint, quart and gallon size cans made by Eastern Can Co., Brooklyn. Label color scheme is metallic maroon (a new color) and white. The pint size can retails for 79 cents and the quart and gallon sizes are $1.35 and $4.25, respectively.

The bactericidal tests were carried out by Hudson Laboratories, Inc., New York, which, according to Trio, found a better than 99 percent kill of all germs and bacteria found on floors. The germicidal ingredient is 3.5 percent ortho benzyl parachlorophenol.

—★—

Lodge Joins Hollingshead

Edward F. Lodge, Jr., was recently appointed general traffic manager of R. M. Hollingshead Corp., Camden, N. J., it was announced late last month by Wilbur H. Norton, president. Mr. Lodge, is making his headquarters at Camden, N. J.

HAND CLEANERS

Put your organization and your customers in the position of benefiting from the "know-how" gained during 40 years of making better and better hand cleaners.

WORKERS like the quick-lathering, gentle scrubbing, easy-rinsing action of Mione. And its very definite skin conditioning value.

MANAGEMENT likes the safe, sanitary, efficient, trouble-free Mione features, plus its economy per pound, low cost per scrub-up, and the basic economy of skilled hands always at top productivity.

EVERYONE who sells washroom supplies will be interested in the competitive price structure, the handsome jobber discount, and the steady repeat orders that come from complete consumer satisfaction.

PRICES AND SAMPLES GLADLY FURNISHED ON REQUEST

Mione MANUFACTURING COMPANY

Makers of famous hand soaps for 40 years

COLLINGDALE PENNSYLVANIA

WHY polish profits climb when you specify DUROXON J-324

From the report of a Nationally Famous Independent Laboratory:

"Duroxon J-324 wax is an excellent product for use in the wax polish art.

We note particularly the excellent emulsifiability of the wax and the fact that preparations can be made with approximately 40% of the soap content generally used to emulsify other waxes. It has a high degree of soiling and scuffing resistance which reflects a tough, hard film."

Get complete information on this superior Hard-Wax today!

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Please send me sample, and laboratory report of DUROXON J-324.

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STREET .....

CITY .....

(Please attach coupon to your letterhead)

Largest NSSA Dallas Conference

A SOUTHWESTERN regional conference of the National Sanitary Supply Association, held Aug. 7 at the Adolphus Hotel, Dallas, was the largest such meeting held in the area. Lacy E. Crain, head of Conco Chemical Co., Dallas, and national vice-president of the National Sanitary Supply Association, was general chairman for the meeting, which largely featured talks on product information and the importance of proper sales and service.

Philip Shore of Shore Metal Products Co., Los Angeles, president of N.S.S.A. spoke at the meeting and introduced Travis T. Wallace, president of Great American Reserve Insurance Co., Dallas, who spoke on selling.

Other N.S.S.A. officers and directors present for the meeting were Burton L. Feinson of American Dispenser Co., New York, eastern regional vice president of N.S.S.A. and W. M. Pettett, W. M. Pettett Co., Miami, Okla., southwestern regional vice-president.

Bernard T. Kelly, assistant executive secretary of N.S.S.A., was moderator for a discussion of "Selling Quality." Mr. Kelly also reported on the current activities of the association, and outlined some of the plans for the future. Others on the program included Morty Herz of Bell Chemical Co., Dallas, who spoke on insecticides; Jack Henderson, southwestern representative of Candy & Co., Chicago, who told "How to Apply Floor Wax." Robert DeRosier, southwestern representative of T. F. Washburn Co., Chicago, discussed floor finishes. A feature of the afternoon session was a discussion of "Floor Brushes, How to Select and Sell Them," by Robert Wittrock of Bexar Chemical Co., San Antonio, and a motion picture provided by the Bell Telephone Co., "How to Accept and Sell Orders by Telephone."

The meeting concluded with a cocktail party for which manufacturers were hosts and a dinner dance in the Roof Garden.

—★—

New Floor Dressing

"Kleer-Cote," a new clear, hard, high gloss floor dressing for rubber, asphalt tile, linoleum, terrazzo and other types of flooring was announced recently by Chemical Service of Baltimore, Inc., Baltimore. Claimed to be "buffable" and removable, "Kleer-Cote" may be cleaned by damp mopping. The manufacturer also claims the new floor dressing is scuffless and that its shine may be restored by buffing.

—★—

New Warwick Wax

Polymekon wax, a newly developed chemical modification of microcrystalline wax, has just gone into full-scale plant production at the Chanute, Kans., refinery of Warwick Wax Co., subsidiary of Sun Chemical Corp., Long Island City, N. Y., it was announced late last month by Ralph C. Persons, president of Sun.

Completion of enlarged production facilities at the Chanute refinery makes this wax available in all quantities for immediate shipment. Heretofore, it has been available only in pilot plant quantities.

The new wax is not a blend of microcrystalline waxes with polyethylene, but a different wax product produced by further chemical processing. It is the invention of Dr. John J. Fish, Warwick's director of research and refining, who also designed the units newly installed at Chanute to produce this material.

Ralph C. Persons

The ability of Polymekon to form films is its most important property, according to Warwick. Because of this it is being offered as an additive in the manufacture of paste polishes, varnishes, etc.

—★—

Guardian Chem. Expands

Guardian Chemical Corp., Long Island City, N. Y., announced recently that it has now completed its plans for expansion in its field and that it now carries one of the most completely diversified lines of germicides, fungicides and algaecides. These products are finding a wide range of application in such specialties as home and industrial cleaners, disinfectants, soaps, cosmetics and toiletries and waxes. They are used as sanitizing agents in food processing and packing plants and in commercial laundries.

Guardian Chemical Corp. began operations several years ago with the introduction of the germicide and fungicide "Clorpactin." The product has since been brought out in a wide range of medicinals and pharmaceuticals.

Recently introduced were "Clearoxin," containing "Clorpactin WCS-50," and "Kasdenol," containing "Clorpactin WCS-60." Other products containing this new germicidal agent will be marketed soon by other franchisees.

—★—

Dr. Fuchs in Europe

Dr. Charles F. Fuchs, director of research for Emulsol Corp., Chicago, is visiting various chemical plants in Austria, Switzerland, France and England during a current trip to Europe. Dr. Fuchs was to attend the first World Congress on Surface Active Agents at the Sorbonne in Paris, which was held Aug. 30 to Sept. 3.

TRIO CHEMICAL WORKS, INC.

the House of SANITATION CHEMICALS

WAXES
SOAPS
DISINFECTANTS
INSECTICIDES
POLISHES
CHEMICAL SPECIALTIES
PRIVATE LABELING

"TIME TO SHINE"
WITH THE
TRIO LINE

The Finest Floor Maintenance Products

TRIO PASTE WAXES (Oil Base containing Carnauba Wax)
TRIO EMULSION PASTE WAX (For Asphalt Tile & Rubber Floors)
TRIO SELF POLISHING WAXES (Made with Carnauba Wax)
TRIO SCRUB SOAPS AND CLEANERS (For All Types of Floors)

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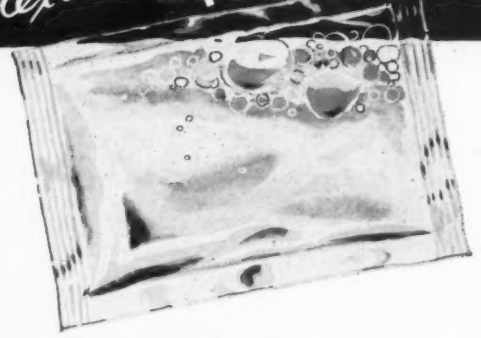

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Plunkett Chemical 50

Plunkett Chemical Co., Chicago, is observing this year its 50th anniversary as a major producer of washroom sanitation chemicals and a pioneer in plumbing maintenance and washroom sanitation services.

—— ★ ——

Warwick Wax Slabber

The installation of a fully automatic wax slabbing machine, claimed to be an innovation in the wax field, at the Chanute, Kans., refinery of Warwick Wax Co., subsidiary of Sun Chemical Corp., Long Island City, N.Y., was announced recently.

The new slabber works on the principle of an extruding machine and produces wax slabs uniform in size and weight. The extrusion process is preceded by a rapid cooling and crystallization step, which results in wax slabs of apparently lighter color than those previously obtained by slow cooling of wax in open pans.

At the same time Warwick announced that its waxes are now produced in 10 pound slabs instead of 20 pound units as was done previously.

One of the chief advantages claimed for the new slabbing process is that thin slabs are brittle, making it easier for them to be broken into small pieces when they are dropped into kettles or other processing equipment. The broken wax melts more rapidly and more easily than traditionally cast slabs because its greater surface area promotes heat transfer.

The first Warwick wax shipped in the form of 10 pound slabs was "Makon Y-20". Now, however, the slabbing operation has been extended to include "Cardis 314," "319" and "320," as well as other Warwick waxes.

—— ★ ——

Strauss to Brazil

I. Y. Strauss, president of Dura Commodities, New York, recently left for Brazil to visit producers of carnauba wax. He will return in about a month.

Samuel Curtis Johnson, above, great-grandson of the founder of S. C. Johnson & Son, Inc., Racine, Wis., and son of the president, Herbert E. Johnson, recently became a member of the firm's administrative management division. The most recent member of the Johnson family to join the Racine wax firm recently completed a two year tour of duty with the United States Air Force.

—— ★ ——

New Fumeral Unit

A low-cost interchangeable half-gallon aluminum jar for all of the firm's pressure type insecticide, deodorizing and fumigating units was announced recently by Fumeral Co., Racine, Wis. The new jar is made of heavy gauge aluminum and is precision engineered to fit present Fumeral units exactly. Heretofore glass jars were the only available type. The new aluminum jars retail for $4.50 each, fob Racine.

Malathion for Fly Control

Effective control of houseflies in poultry houses by use of malathion spray is reported by the Louisiana Agricultural Experiment Station, Baton Rouge, La. Tests were conducted during 1953 at the station's poultry farm and in local commercial houses. Malathion spray was used at the rate of one pound of the technical chemical from emulsifiable concentrate, with 20 pounds sugar, per 100 gallons, with "excellent" results in control of both adult flies and maggots.

The spray was applied with a three gallon compressed air sprayer to the droppings area, cages and supports in the single hen battery cage type of house. An average of one quart of spray per 100 square feet of floor space was used in the houses. Within 30 minutes after application practically 100 percent kill of all adult flies was obtained, the progress report on the project states. This application also continued killing adults for approximately one week. Maggots were killed within two hours after application and it was found that a weekly spraying schedule kept the fly population, both adult and maggots, at a minimum.

Spray application to droppings in winter failed to effect larval control, owing to the habit of the maggots of burying themselves deeply in the mass. With larval control the foul odors from the droppings practically disappeared.

The Louisiana report also stated that use of TEPP and lindane mixtures as baits for fly control have a high mortality to adult flies for one to two days but that no larval control with this method was obtained. "At the best" the report adds, "only temporary reduction in fly population was possible."

Malathion is considered relatively safe to handle and use around poultry, the report comments. No adverse effects were noted on birds or eggs where the spray was continually used for three months with the spray mist falling on the birds themselves.

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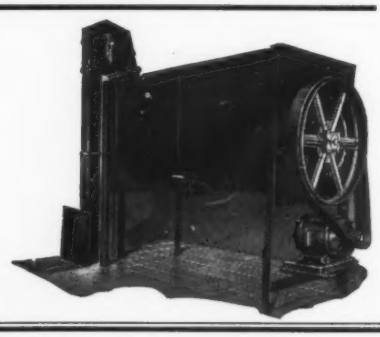

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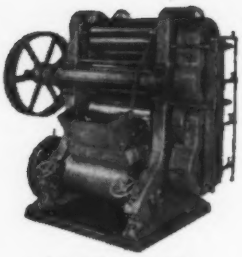

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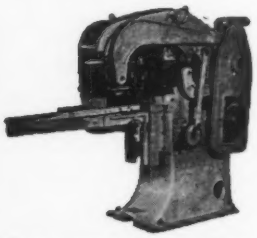

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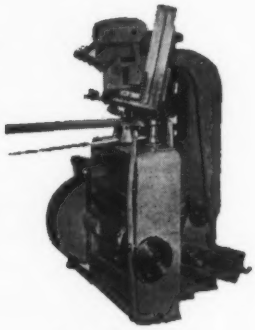

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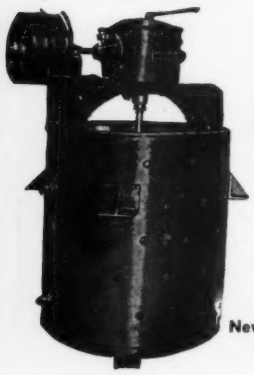

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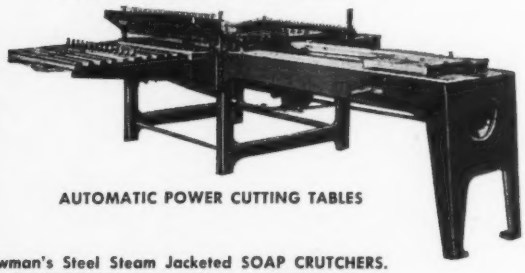

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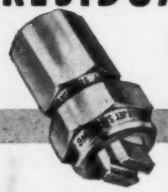

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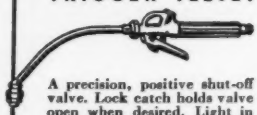

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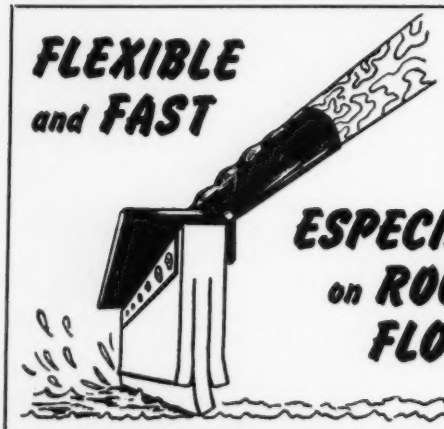

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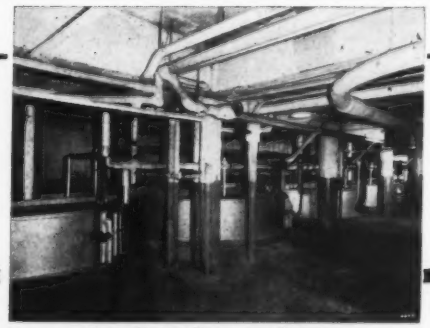

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Chemist: Ph.D., 20 years experience in manufacture and development of insecticides, disinfectants, waxes, cleaners and other sanitary chemicals seeks full-time or consultant position. Address Box 271, c/o *Soap*.

Waxes, Sales-Purchasing: Vegetable wax — raw materials for chemical specialties industry. Contacts varied. Desires greater challenge with future not necessarily same line. Experience all phases, import to mfg. Administrative background. College graduate. Prefer New York area. Address Box 279, c/o *Soap*.

Chemist: Widely experienced in waxes, polishes, emulsions, floor coatings, automotive chemicals, household products, — desires connection with progressive firm. Metropolitan New York area preferred. Experienced in production, development and research. Address Box 272, c/o *Soap*.

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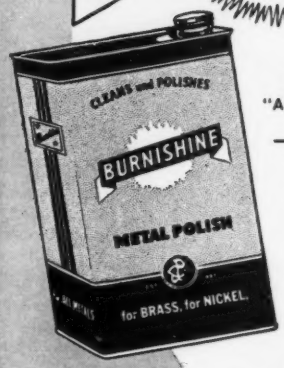

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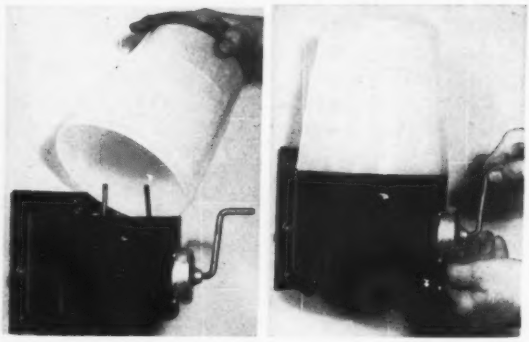

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"Handbook of Pest Control" by Arnold Mallis a completely new up-to-date book. For further details see page 130.

Stainless Steel tanks and kettles. Steel tanks and kettles; crutchers; powder mixers; pulverizers, etc. Perry Equipment Corp., 1410 N. 6th St., Philadelphia 22, Pa.

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For Sale: Pneumatic Scale Packaging line complete; Houchin 10″ jumbo plodder; Lehmann 14″ plodder; Houchin 14″ x 36″ 5-roll inclined w.c. mill; Jones automatic laundry & toilet soap presses; Pkg. Machy. model TT and model N soap wrapping machines; 1500 lb. to 6000 lb. crutchers; 12″ to 42″ filter presses; powder mixers; paste and liquid mixers; Rotex screens; Hammer mills; soap frames; jacketed kettles; pumps; agitators; gluer-sealers, etc. Ask us to quote — Send us your list of surplus machines or plants. Consolidated Products Co., Inc., 59 Garden Street, Hoboken, New Jersey. Tel: HO 3-4425. N. Y. Tel: BA 7-0600.

For Sale: Reprints "Synthetic Detergents Up-To-Date" II (Newest Revision). Price $1.50. Available from J. W. McCutcheon, 475 Fifth Ave., New York 17, N. Y.

Home Garden Aerosols

Home garden aerosols containing a combination of two percent Dilan and lindane have been found, so far, "the best formulation for general effectiveness against vegetable insects," according to a report on tests conducted at the Maryland Agricultural Experiment Station, College Park, Md. The report cautions, however, that lindane may impart an off-flavor to some crops, particularly potatoes when frequent treatments are made near harvest time. No off-flavor from this material occurs in melons, cucumbers, cabbage and other leafy crops that are eaten uncooked, the investigators found. In single insecticide formulations malathion gave good general results but was found to retard plant development of cucurbits when used too frequently. In addition to developing a general formulation, the tests accumulated considerable information on performance of several different insecticides.

This information, says the report, "is of considerable interest to entomologists, since the methyl chloride propellent and the methylene chloride solvent used in the aerosol are both highly volatile, they are dispersed in the air soon after application, leaving the insecticidal residues on the plant. Since only technically pure insecticides are used in aerosols, plant damage and toxicity to insects can be attributed directly to the chemical used."

— ★ —

New Dura Waxes

Dura Commodities Corp., 20 Vesey Street, New York, recently introduced two new soft waxes which can be used for soaps, detergents, textile finishing, greases and emulsions, cosmetics, resin and wax blends, as a chemical raw material, etc. According to the announcement, the waxes, known as Duroxons D-150 and D-250, consist of high molecular weight fatty acids and other oxygenated materials and can be used where gels and aqueous emulsions are made by saponification.

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NY BIMS Final Outing

The final golf outing of the 1954 season of the BIMS of New York will be held Tuesday, Sept. 21, at Wykagyl Country Club, Wykagyl, N. Y. New York BIMS held their August outing at the Wheatley Hills Country Club, E. Williston, L. I., N. Y.

—★—

Olin-Mathieson Now Merged

The merger of Olin Industries, Inc., Olin, Ill. and Mathieson Chemical Corp., Baltimore, to become Olin Mathieson Chemical Corp. became effective Aug. 31.

Chairman of the new organization is John M. Olin, president of Olin. Thomas S. Nichols, president of Mathieson became president of Olin Mathieson. John W. Hanes is chairman of the finance committee.

Names of other executive officers were to be announced following the first meeting of the new board of directors, Sept. 9.

—★—

FOA Post to Johnson

Herbert F. Johnson, president of S. C. Johnson & Son, Inc., Racine, Wis., was recently appointed director of the Office of Industrial Resources of the Foreign Operations Administration. He succeeds Glenn H. Craig, who continues with FOA as a special consultant to the director, Harold Stassen.

—★—

Final SAACI Outing

The Chemists' Club trophy was to be awarded to the winner of the final golf tournament of the Salesmen's Association of the American Chemical Industry, held Sept. 14, at Hackensack Country Club, Oradell, N. J. In addition a program of special entertainment and the awarding of double the usual number of door prizes were to be features of the affair.

Winners of the August golf tournament, which was held on the 10th at Tamarack Country Club, Greenwich, Conn., which featured an outdoor Clam Bake, were:

Class "A" — Low Gross, Stanley Eysman 75, Percy Pyne 80; Low Net, Joe Ruvane 85-14-71, M. A. Middleman 86-15-71; Kickers, Ed Jacobi, Tom Morgan.

Class "B"—Low Gross, A. Pflugh 86, D. B. Sterns 86; Low Net, D. Jackson 94-23-71, D. L. Johnson 94-22-72; Kickers, P. E. Truesdale, J. N. Stokes.

Class "C"—Low Gross, R. J. Foy 104, H. Vonoehsen 105; Low Net, R. W. Meidell 105-35-70; J. Wilson 106-30-76; Kickers, Tom Craig, P. Tinsley.

Guests — Low Gross, Dr. Wiley 77, E. Elbin 83, W. Watts 83, Low Net, Robert Strain 87-30-67; J. W. Nagel 99-30-69; Kickers, Ed. Jarmus, A. M. Setapen.

Longest Drive — 18th Hole—(1) D. C. Oskin, (2) G. Kramer.

Nearest to Pin — 3rd Hole—Ed. Kuhn, 1 foot, 2½ inches.

—★—

New Rhodia Reodorant

The commercial availability of a specially designed industrial reodorant for airborne odor abatement in the soap manufacturing and rendering industries was announced recently by Rhodia, Inc., New York. Designated "Alamask CPM," the new reodorant is said to have proved successful in controlling decayed meat or rancid fat malodor caused by amines, aldehydes and betaines in the rendering of meat and scrap for soap manufacturing.

—★—

Wyandotte Advances Chien

Dr. Robert I. Chien became manager of market research M.S. Division, Wyandotte Chemicals Corp., Wyandotte, Mich., Sept. 1. A member of the department since September, 1951, Dr. Chien is responsible for market research and forecasting for divisional products.

A graduate of the University of Minnesota, Dr. Chien received his Ph.D. in 1953. He spent five years teaching and doing graduate work in economics and statistics at the University of Minnesota prior to joining Wyandotte.

—★—

Republic Chemical Formed

The formation of Republic Chemical Co. and the opening of its retail store and wholesale warehouse at 1902 No. Beckley St., Dallas, Tex., was announced recently by Robert N. Bauman, general manager.

Carbide, Carbon Changes

Three changes in the industrial chemicals sales organization of Carbide and Carbon Chemicals Co., a division of Union Carbide and Carbon Corp., New York, were announced recently by E. E. Fogle, vice-president.

R. L. Duncan, who was Detroit district sales manager, has been appointed eastern division sales manager with headquarters in New York. He is to supervise the activities of the six district sales offices in Albany, Baltimore, Boston, Newark, New York and Philadelphia.

J. S. Harlow has been appointed Detroit district sales manager, having previously been district sales manager in Atlanta.

G. E. Bernard was appointed Atlanta district sales manager. Previously he held the same position for the San Francisco district.

Earlier Carbide and Carbon Chemicals Co. had announced the issuance of two new technical bulletins. One covers physical properties, specifications, shipping data, constant boiling mixtures, physiological properties and uses of ethylene glycol. The other technical bulletin, F-7220, covers physical properties, specifications and shipping data for propylene glycol. The booklet also carries a table of compatibilities with various materials. Eight charts showing physical properties of interest to users of ethylene glycol are present in technical bulletin F-8327. Both are available upon request from Carbide and Carbon Chemical Co., 30 E. 42nd St., New York 17.

—★—

Selig Issues Catalog

The release of its new 1954 catalog and handbook of products and equipment of every type for sanitation was announced late last month by Selig Co., Atlanta. The catalog is designed to simplify mail order buying.

Complete specifications on all types of janitorial equipment are furnished. The catalog is indexed and sectionalized for easy reference.

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Tale Ends

AN outfit by the name of the "Fairies-Young Soap Co." seems to be operating in Dayton, Ohio, according to the "U. S. Government Advertiser," and was recently awarded a contract for insect repellent by the Navy. This is the first inkling we have had that Davies-Young Soap Co. might have changed its name. Now, there are four Youngs associated with the firm, Fred, the well-known octogenarian father and three of his sons, Russ, Howard and John. Davies has been just part of the name these many years. Up to now, we did not know that they had added any "fairies" in place of "Davies." Comes as something of a shock and a surprise. Must be some explanation.

* * * * *

Foster Snell and his wife, Connie Snell, have been making the newspapers quite frequently of late on account of the expansion in the activities of their research organization, Foster D. Snell, Inc., N. Y. Mrs. Snell, like Foster, is a Ph. D. in chemistry in her own right. For some years, she wrote widely on chemical subjects,—including many articles for this publication also,—under her maiden name, Cornelia Tyler. Currently, she is president of the Association of Professional Women,—and likewise very active in detergent research. So, if you call there, don't just ask for Dr. Snell,—be specific.

* * * * *

Perfume for milady at $10,000 per bottle! Don't give us that fishy eye, gentle reader, because we saw with our own eyes an advertisement in the staid *New York Times* where Bonwit Teller, a New York department store, has the product for sale. The product is called Royal Gem,—there's a famous Kentucky stallion now standing at stud in Lexington by this name,—was announced by one Count Dorelis in a half-page advertisement in that newspaper recently. The bottle is stated to be studded with fourteen carats of diamonds in gold filagree. We wonder what it smells like and if there has been any great rush of business so far.

* * * * *

What well-known producer of perfuming materials in what city in France recently had two cakes of "Dial" soap sent to them from the U. S.? We wonder which they are interested in, the odor—which is a good one—or the hexachlorophene content of the soap? For the correct answer to all these questions, we offer one free package of bubble gum.

* * * * *

A new salesman is reported to have filed his application for a job with Roubechez, Inc., New York perfume materials house, the application to be effective in July, 1977. The young fellow's name is Thomas Edmon, born about six weeks ago in Connecticut, July 22 to be exact. It so happens that he is the son, and fourth child, of Harold Edmon, vice-president of Roubechez,—and his old man says he already shows signs of being a real salesman.

* * * * *

Apparently the death of an insect may or may not be a permanent affair. We quote from a classified advertisement in the previous issue of this publication: "Complete repellent action insecticide against flies and mosquitoes up to 56 days even with doors open; kills all insects for a long time." Sort of a note of finality about this, isn't there?

* * * * *

The National Institute of Diaper Services for some time has been out to have a law passed which would exempt money spent by mothers for "antiseptic diaper service" from income taxes. Well, that's one for the record. But what about Mrs. McGuff who buys her detergent or soap at the supermarket down the street and washes her brats' clothes at home,—including diapers for the young ones? Or let's abolish all income taxes. Why just bother with exceptions?

* * *

More grapevine stuff. We hear that Colgate-Palmolive who for over 100 years have had headquarters in Jersey City, are going Park Av. on us come early 1955. The rumor has it that they will move to large and spacious offices at 300 Park Av., N. Y. which will become company headquarters. Also the rumor mongers say that Mathieson Chemical are going to give up their fancy 20-odd story building at 10 Light St., Baltimore and move back to N. Y., possibly in the Squibb Bldg. on Fifth Ave.

* * * * *

Homer Banta former president of the Iowa Soap Co. for many years, who died recently, had a heart of gold as many of those who knew him well will attest. His charities were chiefly in aiding needy youngsters through college which fine work he carried on for years. For some years prior to his death, he had not been in good health. In his latest illness, he had been attended by a doctor whose medical education he had financed.

Take a look...

TAKE a look at your advertising picture. Are you buying a lot of waste circulation at fancy rates? Or are you shooting direct at fields you do and can sell through publications with concentrated pay-dirt circulation? Now, if it be the field of soaps, detergents, cleansers, insecticides, aerosols, floor products, and other chemical specialties, where you want complete and concentrated coverage, take a close look at

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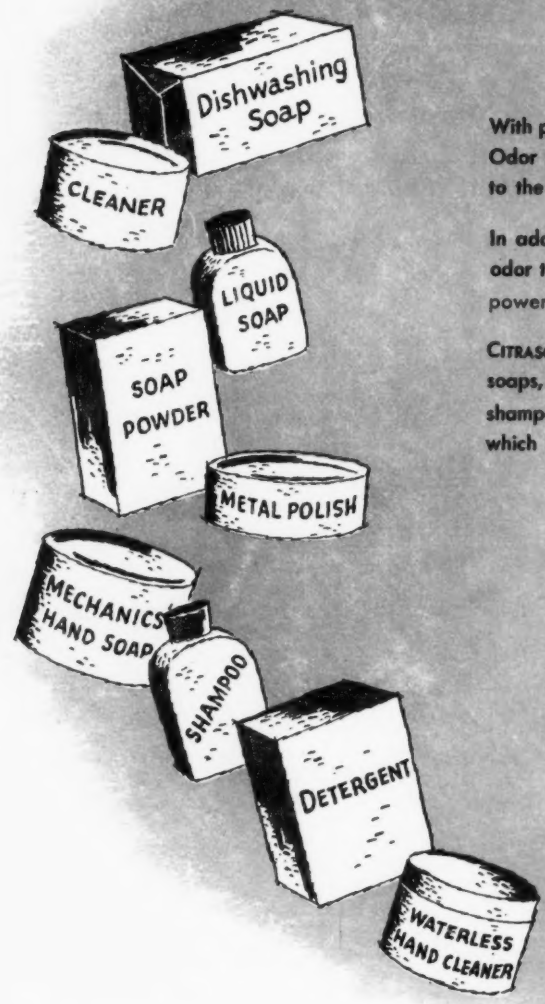
A POWERFUL, REFINED *Lemon-Type Reodoran*

more stable... more uniform in odor value... and only ⅓ the cost of natural Oil of Lemon!



With prices of natural Oil of Lemon going sky-high, using our new CITRASCENT Lemon-type Odor means a saving of approximately two-thirds—a figure that is *not* subject to the erratic price fluctuations so characteristic of the natural Oil.

In addition to its economical cost—CITRASCENT has a sweeter, much more refined odor than Oil of Lemon. It provides freedom from discoloration in soap... has greater power, lasting qualities and lift . . . is more uniform and stable in odor value!

CITRASCENT may be used in brown bar soap, white soap, soap chips, dishwashing soaps, cleaners, liquid soaps, soap powders, metal polishes, mechanics' hand soap, shampoos, detergents, waterless hand cleaners and in many other products which have an objectionable odor. It is available at the following prices:

1 lb. lots	$2.15 lb.
5/10 lb. lots	$1.90 lb.
25 lb. lots	$1.85 lb.
50/100 lb. lots	$1.80 lb.
400 lb. drums	$1.75 lb.

F.O.B. New York

Why not make your own tests! We'll be glad to send you free samples. No obligation, of course.

AROMATIC PRODUCTS, Incorporated

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